

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE RELATIONSHIPS BETWEEN SOCIAL MEDIA
MARKETING COMMUNICATIONS, CONSUMER-BASED
BRAND EQUITY AND CONSUMER RESPONSE AMONG
AUTOMOTIVE BRANDS IN MALAYSIA**



RAJI RIDWAN ADETUNJI

UUM
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
2018**



Awang Had Salleh
Graduate School
of Arts And Sciences

Universiti Utara Malaysia

PERAKUAN KERJA TESIS / DISERTASI
(Certification of thesis / dissertation)

Kami, yang bertandatangan, memperakukan bahawa
(We, the undersigned, certify that)

RAJI RIDWAN ADETUNJI

calon untuk Ijazah
(candidate for the degree of)

PhD

telah mengemukakan tesis / disertasi yang bertajuk:
(has presented his/her thesis / dissertation of the following title):

"THE RELATIONSHIP BETWEEN SOCIAL MEDIA MARKETING COMMUNICATIONS, CONSUMER-BASED BRAND EQUITY AND CONSUMER RESPONSE AMONG AUTOMOTIVE BRANDS IN MALAYSIA"

seperti yang tercatat di muka surat tajuk dan kulit tesis / disertasi.
(as it appears on the title page and front cover of the thesis / dissertation).

Bahawa tesis/disertasi tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan, sebagaimana yang ditunjukkan oleh calon dalam ujian lisan yang diadakan pada: **11 June 2018**.

That the said thesis/dissertation is acceptable in form and content and displays a satisfactory knowledge of the field of study as demonstrated by the candidate through an oral examination held on: June 11, 2018.

Pengerusi Viva:
(Chairman for VIVA)

Prof. Dr. Ku Ruhana Ku Mahamud

Tandatangan
(Signature)

Pemeriksa Luar:
(External Examiner)

Prof. Dr. Azizul Halim Yahya

Tandatangan
(Signature)

Pemeriksa Dalam:
(Internal Examiner)

Dr. Mohamad Ghazali Hassan

Tandatangan
(Signature)

Nama Penyelia/Penyelia-penyelia:
(Name of Supervisor/Supervisors)

Dr. Sabrina Mohd Rashid

Tandatangan
(Signature)

Nama Penyelia/Penyelia-penyelia:
(Name of Supervisor/Supervisors)

Dr. Mohd Sobhi Ishak

Tandatangan
(Signature)

Tarikh:

(Date) **June 11, 2018**

Permission to Use

In presenting this thesis in fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the Universiti Library may make it freely available for inspection. I further agree that permission for the copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of Awang Had Salleh Graduate School of Arts and Sciences. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:

Dean of Awang Had Salleh Graduate School of Arts and Sciences

UUM College of Arts and Sciences

Universiti Utara Malaysia

06010 UUM Sintok

Abstrak

Pembentukan dan pengurusan ekuiti jenama lazimnya diberi keutamaan oleh kebanyakan organisasi memandangkan jenama merupakan aset yang paling bernilai kepada organisasi. Oleh hal yang demikian, para penyelidik cuba menggandakan usaha untuk memahami faktor yang mempengaruhi perkembangan ekuiti jenama berteraskan pengguna (CBBE) dan kesannya. Namun begitu, para penyelidik kurang memberikan tumpuan dalam mengukur CBBE daripada konteks jenama automotif. Selain itu, dengan mengambilkira kemajuan platform digital yang berterusan seperti media sosial, perubahan persekitaran komunikasi pemasaran telah mewujudkan lompang ilmu tentang bagaimana kandungan media sosial disampaikan dalam meningkatkan CBBE dan respon pengguna. Berdasarkan Model Respon Rangsangan Pengguna (CSRM), kajian ini meneliti hubungan antara komunikasi pemasaran media sosial, terutamanya yang dijana oleh pengguna (media sosial dari mulut ke mulut) dan dihasilkan oleh firma (periklanan media sosial, promosi media sosial, dan pemasaran interaktif media sosial), CBBE serta respon pengguna dalam kalangan jenama automotif. Tiga peringkat proses pengesahan digunakan untuk mengesahkan alat pengukuran yang digunakan dalam kajian ini. Pertama, temubual bersemuka yang berbentuk separa berstruktur dijalankan dalam kalangan sepuluh (10) informan. Kedua, tujuh (7) orang pakar yang telah diambil untuk mengesahkan kandungan alat pengukuran yang dibangunkan. Akhir sekali, satu kajian rintis dijalankan terhadap 200 responden. Selanjutnya, 800 orang pengguna daripada empat jenis jenama automotif, iaitu PROTON, PERODUA, TOYOTA, dan HONDA mengambil bahagian dalam tinjauan menggunakan soal selidik tadbir sendiri. Data yang dikutip dianalisis dengan menggunakan SEM. Dapatan kajian mendedahkan bahawa Periklanan Media Sosial, Promosi Media Sosial, Pemasaran Interaktif Media Sosial dan Media Sosial dari mulut ke mulut mempunyai hubungan yang signifikan terhadap CBBE jenama automotif dan respon pengguna. Seterusnya, CBBE memperlihatkan kesan tidak langsung yang signifikan terhadap hubungan antara komunikasi pemasaran media sosial dengan CBBE. Oleh hal yang demikian, kajian ini menyediakan bukti empirikal kepada CSRM dan memberikan wawasan kepada pengurus jenama tentang cara pengurus boleh meningkatkan ekuiti jenama automotif menerusi komunikasi pemasaran yang disebarkan melalui platform media sosial.

Kata kunci: Ekuiti jenama berteraskan pengguna, Komunikasi pemasaran, Komunikasi media sosial, Respon pengguna, Jenama automotif

Abstract

Developing and managing brand equity are top priorities for many organizations because brand is one of the most prized assets of organizations. As such, researchers continue to exert substantial efforts on understanding the factors that influence the development of Consumer-Based Brand Equity (CBBE) and its consequences. However, researchers have not really focused on measuring CBBE from the context of automotive brands. The continuous advent of digital platforms such as social media, the environment of marketing communications is changing, leaving a knowledge gap in how the contents disseminated on social media are enhancing CBBE and consumer response. Relying on the Consumer Stimulus-Response Model (CSRSM), this study examines the relationships between the social media marketing communications; (1) user-generated type (Social Media Word-of-Mouth), (2) firm created types (Social Media Advertising, Social Media Promotion and Social Media Interactive Marketing), (3) CBBE and (4) Consumer Response among automotive brands. Three stages of validation processes were employed to validate the measurement scales in this study. Firstly, a semi-structured face-to-face interview was conducted among ten (10) informants. Secondly, seven (7) experts were recruited to content validate the developed scales. Finally, a pilot study was conducted among 200 respondents. Subsequently, 800 users of four types of automotive brands namely; PROTON, PERODUA, TOYOTA and HONDA were surveyed using a self-administered questionnaire. The data collected was analyzed using Structural Equation Modelling. The findings revealed that Social Media Advertising, Social Media Promotion, Social Media Interactive Marketing and Social Media Word-of-Mouth have significant relationships with the CBBE of automotive brands and consumer response. Furthermore, CBBE demonstrates a significant indirect effect on the relationships between social media marketing communications and CBBE. Consequently, this study provides empirical evidence to the CSRSM and provides insights for brand managers on how to enhance brand equity of automotive brands through marketing communications disseminated on social media platforms.

Keywords: Consumer-based brand equity, Marketing communications, Social media communications, Consumer response, Automotive brands.

Acknowledgement

In the name of Allah, the most beneficent, the most merciful

First and foremost, I give thanks to the Almighty Allah for His divine protection over me, and for giving me the wisdom, understanding, strength and grace that saw me to the end of this program. I ask for his forgiveness and continuous guidance throughout my life time and hereafter.

My special note of thanks goes to my parents Alhaji Ismail Abiodun Raji and Alhaja Ganiyat Raji. I am forever indebted for their love, prayers and supports. I pray to Allah to allow you both live long and reap the fruits of your labor. This report and my entire PhD program could not have ended well without the support of my wife and the love of my son. At one hand, my wife kept our household fire burning and at the other, she serves as my closest critique. For that, I dedicate this report to my wife; Taofeeqat Fola and my son; Ismail Ashola Adewale Raji.

I specially recognize the love and support of my siblings (Taibat, Habeebah, Raheemat, Ishaq, Fatimah, Muhyideen, Zubaidat and Kafayah) and my brother in-laws; Assoc. Prof Rasheed Jimoh, Engr. Razaq Hammed and Alhaji Ganiyu. I also appreciate the motherly and fatherly supports of my father in-law Engr. Taofeeq Soluoku and my mother in-law Mrs M. A. Soluoku. I can never forget your love and supports. I pray Allah continues to bless you all.

My sincere appreciation goes to my main and co supervisors; Dr. Sabrina Binti Mohd Rashid and Dr. Sobhi Bin Mohd Ishak for allowing me to benefit from your wealth of knowledge and to drink from your stream of experiences. The support, guidance and counseling you offered me throughout the course of this programme are priceless. I pray the Almighty Allah continue to safeguard your affairs and replenish you with abundant wisdom and understanding.

Obviously, I have more than one reason to appreciate the management of UUM. Firstly, for granting me the postgraduate scholarship scheme without which completing my PhD here in UUM would have been a dream that never saw the day light. Secondly, for creating an enabling environment and facilities which are nearly utopia for doing research and self-development. Furthermore, I am thankful to the entire faculty members of School of Multimedia Technology and Communication

(SMMTC) and especially to my reviewers during my proposal defense; Dr Norizah Aripin and Dr Bahtiar Mohamad your comments and suggestions really helped in improving my research.

I thank my friends and colleagues in Nigeria and in Malaysia for their encouragements and supports. Finally, I appreciate all my friends in UUM at large and colleagues at SMMTC. I must say I learn a lot from our camaraderie and research companionship.

Raji Ridwan Adetunji,
November, 2017.



Table of Contents

Permission to Use	ii
Abstrak.....	iii
Abstract.....	iv
Acknowledgement	v
Table of Contents.....	vii
List of Tables	xiii
List of Figures.....	xv
List of Appendices	xvi
List of Abbreviations	xvii
CHAPTER ONE INTRODUCTION	19
1.1 Background of the Study	19
1.2 Problem Statement	25
1.3 Research Questions	27
1.4 Research Objectives	28
1.5 Scope of the Study	29
1.6 Significance of the Study	30
1.6.1 Theoretical Significance of the Study.....	30
1.6.2 Methodological Significance	32
1.6.3 Practical Significance of the Study	33
1.7 Organization of the Thesis	33
CHAPTER TWO LITERATURE REVIEW	36
2.0 Introduction.....	36
2.1 Measurement of Consumer-Based Brand Equity.....	36
2.2 Consumer Based-Brand Equity in the Context of Automotive Brands	43
2.2.1 Brand Awareness	47
2.2.2 Functional Brand Image.....	49
2.2.3 Hedonic Brand Image	52
2.2.4 Brand Sustainability.....	54
2.3 Consumer Response.....	56
2.4 Social Media Marketing Communications	59

2.4.1 Social Media Advertising	60
2.4.2 Social Media Promotion	62
2.4.3 Social Media Interactive Marketing	64
2.4.4 Social Media Word-of-Mouth	65
2.5 Review of Previous Studies	67
2.5.1 Social Media Marketing Communications and Consumer-Based Brand Equity	67
2.5.2 Social Media Marketing Communications and Consumer Responses	75
2.5.3 Consumer-Based Brand Equity and Consumer Response	77
2.6 Consumer Stimulus-Response Model	79
2.7 The Theoretical Framework	86
2.8 Summary of the Chapter	90
CHAPTER THREE METHODOLOGY	91
3.0 Introduction	91
3.1 Hypotheses Development	91
3.1.1 Direct Relationship between Social Media Advertising and Consumer- Based Brand Equity	92
3.1.2 Direct Relationship between Social Media Promotion and Consumer- Based Brand Equity	92
3.1.3 Direct Relationship between Social Media Interactive Marketing and Consumer –Based Brand Equity	94
3.1.4 Relationship between Social Media Word-of-Mouth and Consumer-Based Brand Equity	95
3.1.5 Direct Relationship between Firm-Created Contents and Consumer Responses	96
3.1.6 Direct Relationship between Social Media Word-of-Mouth and Consumer Response	98
3.1.7 Direct Relationship between Consumer-Based Brand Equity and Consumer Response	99
3.1.8 Indirect Effect of Consumer-Based Brand Equity	100
3.2 Research Approach	103

3.3 Research Design.....	105
3.4 Multi-Stages of Items Development and Validation.....	108
3.4.1 Stage 1: Conceptual Definition of Constructs	108
3.4.2 Stage 2: Generating Sample of Items.....	110
3.4.3 Stage 3: Initial Data Collection (Interview).....	113
3.4.4 Stage 4: Scale Purification and Refinement	127
3.4.5 Stage 5: Content Validity.....	128
3.5 Population for the Main Survey	131
3.5.1 Sample Size and Power Analysis.....	133
3.5.2 Sampling Technique	135
3.5.3 Unit of Analysis	136
3.6 Data Collection Procedure	137
3.6.1 Research Ethical Considerations.....	138
3.7 Method of Analysis.....	139
3.7.1 Descriptive Analysis	140
3.7.2 Structural Equation Modeling Technique.....	140
3.8 Summary of the Chapter	145
CHAPTER FOUR DATA ANALYSIS AND FINDINGS	146
4.0 Introduction.....	146
4.1 Pilot Study.....	146
4.1.1 Exploratory Factor Analysis	149
4.1.1.1 Exploratory Factor Analysis of Consumer-Based Brand Equity for Automotive Brands	150
4.1.1.2 Exploratory Factor Analysis for Social Media Marketing Communications	154
4.1.1.3 Exploratory Factor Analysis for Consumer Response	156
4.1.2 Reliability Test.....	157
4.2 Response Rate	158
4.3 Preliminary Data Screening	159
4.3.1 Assessing and Replacing Missing Values	160
4.3.2 Test of Non-Response Bias.....	160

4.3.3 Detection and Treatment of Outliers.....	161
4.3.4 Testing Normality	164
4.3.5 Homoscedasticity	165
4.3.6 Assessment of Linearity.....	167
4.3.7 Assessment of Multicollinearity	167
4.4 Demographic Information of the Respondents	168
4.5 Descriptive Statistics for Measured Variables	171
4.5.1 Descriptive Statistics for Automotive Consumer-Based Brand Equity... 173	
4.5.2 Descriptive Statistics for Social Media Advertising.....	175
4.5.3 Descriptive Statistics for Social Media Promotion.....	176
4.5.4 Descriptive Statistics for Social Media Interactive Marketing.....	177
4.5.5 Descriptive Statistics for Social Media Word-of-Mouth.....	178
4.5.6 Descriptive Statistics for Consumer Response	179
4.6 Structural Equation Modeling.....	179
4.6.1 The Measurement Model	180
4.6.1.1 Measurement Model for Individual Constructs and Dimensions 180	
4.6.1.2 Measurement Model of the Hypothesized Model	181
4.6.1.2.1 Construct Reliability and Convergent Validity of the Hypothesized Model.....	187
4.6.1.2.2 Discriminant Validity	189
4.6.1.2.3 Nomological Validity	189
4.5.2 The Structural Model	190
4.5.2.1 Direct Relationships	192
4.5.2.2 Indirect Relationship of CBBE.....	197
4.5.3 Squared Multiple Correlation for Endogenous Variables (R^2).....	201
4.6 Summary of the Findings.....	202
CHAPTER FIVE DISCUSSIONS, IMPLICATIONS AND CONCLUSIONS	204
5.0 Introductions.....	204
5.1 Overview of the Study	204
5.2 Discussions	209

5.2.1 Direct Relationships between Social Media Marketing Communications and Consumer-Based Brand Equity of Automotive Brands.....	209
5.2.1.1 Direct Relationship between Social Media Advertising and Consumer-Based Brand Equity of Automotive Brands.....	210
5.2.1.2 Direct Relationship between Social Media Promotion and CBBE of Automotive Brands.....	211
5.2.1.3 Direct Relationship between Social Media Interactive Marketing and CBBE of Automotive Brands.....	213
5.2.1.4 Direct Relationship between Social Media Word-of-Mouth and CBBE of Automotive Brands	214
5.2.2 Direct Relationships between Social Media Marketing Communications and Consumer Response.....	214
5.2.2.1 Direct Relationship between Social Media Advertising and Consumer Response.....	215
5.2.2.2 Direct Relationship between Social Media Promotion and Consumer Response.....	216
5.2.2.3 Direct Relationship between Social Media Interactive Marketing and Consumer Response	216
5.2.2.4 Direct Relationship between Social Media Word-of-Mouth and Consumer Response	217
5.2.3 Direct Relationships between Consumer-Based Brand Equity automotive brands and Consumer Response.....	218
5.2.4 Indirect Relationship of Consumer-Based Brand Equity	219
5.2.4.1 Indirect Effect of Consumer-Based Brand Equity on the Relationship between Social Media Advertising and Consumer Response	220
5.2.4.2 Indirect Effect of CBBE on the Relationship between Social Media Promotion and Consumer Response	221
5.2.4.3 Indirect Effect of CBBE on the Relationship between Social Media Interactive Marketing and Consumer Response	222
5.2.4.4 Indirect Effect of CBBE on the Relationship between Social Media Word-of-Mouth and Consumer Response	223

5.3 Implications of the Study	224
5.3.1 Theoretical Implications	224
5.3.2 Methodological Implications	229
5.3.2 Practical Implications	230
5.4 Limitations of the Study.....	231
5.5 Recommendations for Future Study	233
5.6 Conclusions.....	233
REFERENCES.....	237



List of Tables

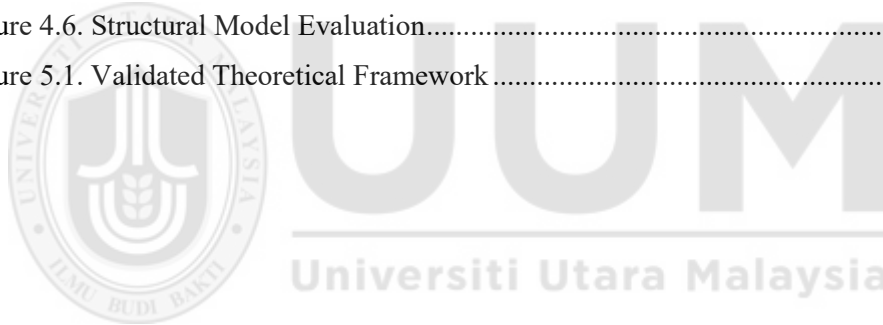
Table 3.1 Informants' Profile.....	115
Table 3.2 Items Generated from Interview for Automotive CBBE	122
Table 3.3 Items Generated from Interview for Social Media Marketing Communications.	127
Table 3.4 Summary of Content Validity Results	131
Table 3.5 List of Samples across Malaysian States	136
Table 3.6 Indices for Evaluating Goodness of Fit.....	144
Table 4.1 Demographic and Basic Information of Pilot Study Sample	147
Table 4.2 Eigenvalue extracted and total variance explained for the four dimensions.....	152
Table 4.3 EFA for Automotive CBBE.....	152
Table 4.4 EFA for Social Media Marketing Communications	155
Table 4.6 Factor Loadings for Consumer Response	157
Table 4.7 Summary of Reliability Tests	158
Table 4.8 Results for Independent-Samples T-test for Non-Response Bias.....	161
Table 4.9 Cases of Outliers at both Univariate and Multivariate Levels	163
Table 4.10 Skewness and Kurtosis Values for Measured Variables.....	164
Table 4.11 Pearson Correlation Matrix.....	168
Table 4.12 Demographic Distribution of Respondents.....	170
Table 4.13 Descriptive Statistics of Variables and Dimensions	172
Table 4.14 Descriptive Statistics of Automotive CBBE	173
Table 4.15 Descriptive Statistics of Social Media Advertising	176
Table 4.16 Descriptive Statistics of Social Media Promotion	177
Table 4.17 Descriptive Statistics of Social Media Interactive Marketing.....	178
Table 4.18 Descriptive Statistics of Social Media Word-of-Mouth	178
Table 4.19 Descriptive Statistics of Consumer Response.....	179
Table 4.20 Goodness-of-Fit statistics for Individual Constructs and Dimensions.....	181
Table 4.21 Goodness-of-Fit statistics for Hypothesized Model.....	183
Table 4.22 Composite Indicators for Hypothesized Model	183
Table 4.23 Composite Reliability and AVE of Hypothesized Model.....	187
Table 4.23 Test of Discriminant Validity	189
Table 4.24 Test of Nomological Validity	190
Table 4.25 Goodness-of-Fit Statistics for Measurement and Structural Models	191
Table 4.26 Summary of the Tested Hypotheses	197

Table 4.27 Test for Indirect Effect of CBBE	200
Table 4.28 Variance Explained in the Endogenous Latent Variables.....	201
Table 4.29 Summary of Hypotheses Tested	203



List of Figures

Figure 2.1. Brand Equity Perspectives (Farjam & Hongyi, 2015).....	37
Figure 2.2. The Consumer-Stimulus Response Model (Kotler et al., 2009; Vakratsas & Ambler, 1999).....	83
Figure 2.3. Proposed Theoretical Framework.....	89
Figure 3.1. Research Design Framework.....	107
Figure 3.2. Sales Record for Passenger Cars for the Month of August 2017 (paultan.org). 132	
Figure 3.3. The Output of a Priori Power Analysis	134
Figure 4.1. Boxplot Graph for Assessing Univariate Outliers	163
Figure 4.2. Scatter Plot for Assessing Homoscedasticity	166
Figure 4.3. Normal P-P Plot for Assessment of Linearity	167
Figure 4.4. Measurement Model of the Hypothesized Model	186
Figure 4.5. Structural Model of the Hypothesized Model	192
Figure 4.6. Structural Model Evaluation.....	193
Figure 5.1. Validated Theoretical Framework.....	228



List of Appendices

Appendix A Item Development	260
Appendix B Interview Consent Letter	270
Appendix C Interview Guide	271
Appendix D Content Validity Form.....	273
Appendix E Results of Content Validity Index (CVI)	281
Appendix F Survey Introduction Letter	284
Appendix G Survey Questionnaire	285
Appendix H AMOS Output	289



List of Abbreviations

AGFI	Adjusted goodness-of-fit statistic
AMOS	Analysis of a Moment Structures
BA	Brand Awareness
BS	Brand Sustainability
CBBE	Consumer-Based Brand Equity
CFA	Confirmatory Factor Analysis
CFI	Comparative fit index
CR	Consumer Response
CSRM	Consumer-Stimulus Response Model
CVI	Content Validity Index
EFA	Exploratory Factor Analysis
FBI	Functional Brand Image
FCC	Firm-Created Contents
GFI	Goodness-of-fit statistic
HBI	Hedonic Brand Image
IFI	Incremental fit index
KMO	Kaiser-Meyer-Olkin
MCMC	Malaysian Communications and Multimedia Commission
MGC	Marketing-Generated Content
NFI	Normed-fit index
NNFI	Non-Norm Fit Index
PCA	Principal Component Analysis
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modeling
SMA	Social Media Advertising
SMIM	Social Media Interactive Marketing
SMMTC	School of Multimedia Technology and Communication
SMP	Social Media Promotion
SMWOM	Social Media Word-of-Mouth
SPSS	Statistical Packages for Social Sciences

TAM	Technology Acceptance Model
TIL	Tucker-Lewis Index
UGC	Users-Generated Contents
UUM	Universiti Utara Malaysia
VAF	Variance Accounted For
WOM	Word-of-Mouth



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Developing and managing brand equity are top priorities for many organizations because brands are one of the most important assets to organizations (Baalbaki & Guzmán, 2016; Keller & Lehman, 2006; Christodoulides, De Chernatony, Furrer, Shiu, & Abimbola, 2006). In view of the importance of brand equity, academia continues to exert significant efforts towards understanding the factors that influence the development of brand equity as well as the consequences of developing brand equity (Netemeyer, Krishnan, Pullig, Yagci, Dean & Wirth, 2004), especially from the consumers' perspective (Williams & Soutar, 2009).

Keller (1993) stated that there are three different approaches to studying brand equity. It can be studied through the customer perspective, the organizational perspective or the financial perspective (Farjam & Hongyi, 2015). Consumer-Based Brand Equity (CBBE) is one of the derivatives of studying and measuring brand equity, and it mirrors the customers' perspectives and mindsets (Baalbaki & Guzmán, 2016).

Furthermore, there are two major aspects to studying CBBE. The first is to understand the factors that contribute to the development of CBBE, such as marketing communications (Cobb-Walgren, Ruble, & Donthu, 1995; Ailawadi, Lehmann, & Neslin, 2003), thus evaluating how marketing activities and marketing communications such as advertising, sales promotion, interactive marketing, Word of Mouth (WOM) and

so forth enhance the development of CBBE (Keller & Lehman, 2006). The second aspect is by studying the consequences of CBBE on consumer behavior and responses in terms of purchase intention and brand preference (Shahin, Kazemi, & Mahyari, 2012; Hanaysha & Hilman, 2015; Williams & Soutar, 2009). Hence, the consequences of CBBE on consumer attitudes and behaviors (Buil, Martínez, & Chernatony, 2013; Hoeffler & Keller, 2003). According to Keller (1993), brand knowledge which is reflected through brand awareness and brand image is the representation of CBBE. Thus, explains how brand knowledge and brand associations influence consumer behaviors. Thus, CBBE is about influencing consumer perception of a brand and consumer behavior (Tuominen, 1999; Farjam & Hongyi, 2015).

As a result of the above, evoking favorable responses and behaviors from consumers has been a major concern for researchers and brand managers, which is the reason brand managers exert aggressive measures to develop their brand assets such as brand equity (Tuominen, 1999). Building an attractive brand equity is absolutely necessary as a strategy for maintaining consumer satisfaction, acceptance and above all, improving favorable consumer responses in a highly competitive market (Creusen & Schoormans, 2005; Horn & Salvendy, 2006; Lew & Sulaiman, 2014). This is because branding gives edges to organizations in consumers' preference lists, provides competitive advantages and offers organizations differentiating competences (Lew & Sulaiman, 2014).

Going by the definition of brand equity by Keller (1999), the differential attributes of a brand, brand equity highlights the differences of brands in the same category. Hence, the brand equity attributes of a brand attract consumers to the brand and subsequently

influence consumer responses (Baalbaki & Guzmán, 2016). Consumer responses are consequences of consumers' overall evaluation of a brand (CBBE) and information derived through the appeals of marketing communications (Chang & Liu, 2009; Tolba & Hassan, 2009; Vinh & Huy, 2016).

Studies on CBBE started emerging since the early 2000's and even more frequently as the environment of marketing communications continues to change (Keller & Lehman, 2006). These studies unanimously demonstrated that, one of the highlights of the changes in the environments of marketing communications is that social media such as *Facebook*, *YouTube*, *Twitter* and Micro-blogs have become important platforms for building and maintaining successful brand equity (Bruhn, Schoenmueller, & Schafer, 2012). Through fan pages or brand profiles that are created on social media, brand managers are offered limitless opportunities for sharing and posting information in the form of photos, videos, messages and comments about their brands and companies (De Vries, Gensler, & Leeftang, 2012). In fact, some empirical findings have evinced that social media communications are outperforming traditional media communications in developing CBBE (Bruhn et al., 2012).

Dholakia, Bagozzi and Pearo, (2004) and Puchan (2015) added that the increasing popularity of social media is due to the embedded potentials of social media platforms in anchoring effective and interactive brand-related communications between brand managers and consumers (Schivinski, 2011; Hamid et al., 2013; Berthon, Pitt, McCarthy, & Kates, 2007). Social media has also opened the opportunity for customers

to become active co-creators and co-managers of brand-related contents on social media platforms.

With regards to exploring the role of the evolving social media marketing communications in the development of CBBE, previous researchers have studied social media communications using various variables, including Firm-Created Contents (FCC), User-Generated Contents (UGC), social media marketing efforts, social media applications, social media advertising and electronic word-of-mouth (Bruhn et al., 2012; Christodoulides, Jevons, & Bonhomme, 2012; Jalilvand & Samiei, 2012; Kim & Ko, 2012). These studies unanimously demonstrated that consumers' evaluation of brand-related communications on social media influence consumer perception, attitude, behavior and mindset towards brands. Meanwhile, the characteristics of the contents of social media communications differ across social media platforms (Smith, Fischer, & Yongjian, 2012). For example, characteristics such as the level of interactivity of contents on *Facebook* are different from that of *YouTube*. Rohm, Kaltcheva, and Milne (2013) demonstrated that consumers' evaluation of social media communication is based on certain characteristics of the contents. Hence, it is important to understand the differential effects of marketing communications that are disseminated on social media.

Considering the huge marketing opportunities that the prevalence of social media creates for the Malaysian economy and businesses (Jusoh, Hashim, & Adi, 2012), the Malaysian Communication and Multimedia Commission (MCMC) (2016) revealed that 77.6% of Malaysian residents have access to the Internet and use the Internet for various activities which include information search and commerce. This is the reason many

companies from various industries are spending enormously to gain significant presence on the Internet, and especially on social media. A survey conducted by Malaysia Digital Association (2016) also found that 87% of companies in Malaysia believe that social media can be used to develop and create awareness for their brands. The Malaysian automotive companies are also not laggards in tapping from the massive marketing potentials of the social media. In fact, RM28.36 million from the total RM1.37 billion spent on digital advertising in the year 2016 was from the automotive industry (Malaysia Digital Association, 2016).

In view of the economic, technological and sociological importance of the automotive industry, the diversity of automotive products is fast changing (Thiripurasundari & Natarajan, 2011; Fetscherin & Toncar, 2009; Brunello 2015). These changes are directly increasing the complexity of the decision-making process of automotive consumers. Consumers are extra-ordinarily active and highly involved in making car purchase decisions (Mahfooz, 2015). Several factors such as; the quality, performance, maintenance, sustainability, affordability and above all, good reputation of an automotive brand are taken into consideration before making final decisions (Lee & Govindan, 2014). In other words, consumers rely on brand attributes and other brand assets of automotive products to simplify their decision-making process (Hsieh, 2004). Thus, strong and successful brand equity becomes an important factor for automotive brands to differentiate themselves from competitors, remain unique and serve as a tool for evoking consumer purchase decisions (Santoso & Cahyadi, 2014).

In theory, brands' functional attributes and consumers' perceptions towards a brand are regarded as dimensions of CBBE. This is the premise which guided the development of various CBBE models. However, CBBE researchers have started paying attention to market sector, product category and specific industry in validating, measuring and studying CBBE (Christodoulides and Chernatony 2010). In view of this, the automotive industry has received less attention among CBBE researchers (Kartono & Rao, 2005) despite its economic importance.

Justifiably, the Malaysian automotive industry serves as a strong backbone to the country's economic development and technological advancement, with a wide range of services such as supply of production materials, sales and other automotive-related operations (Lee & Govandan, 2014). However, as a result of the ongoing economy liberalization in Malaysia, the influx of automotive brands from countries that are highly ranked in automotive production such as Germany, China, Japan and others is increasing competition in the automotive industry (Ghani, 2012). Consequently, both PROTON and PERODUA - which are the two national automotive companies of Malaysia - are currently vying for market dominance with globally successful automotive brands such as Toyota, Nissan and Honda (Hadadi & Almsafir, 2014). In fact, some market reports have evinced that the national automotive brands are dropping in sales figures while foreign and imported brands are gaining more sales in Malaysia (Sultana and Amilin, 2014). Hence, the increasing competitive pressures and complexity in the automotive industry are challenging stakeholders to exert more efforts on the development of successful brands which can enhance favorable response from their consumers (Lee & Govandan, 2014).

With regards to the above, exploring the understanding of consumers on CBBE in the context of automotive brands is particularly important as consumers of automotive products go through a complex process of making purchase decisions (Thiripurasundari and Natarajan 2011; Fetscherin and Toncar 2009; Brunello 2015). Therefore, automotive consumers are extraordinarily active and highly involved in deciding their preferred brands (Mahfooz 2015). These consumers rely on the attributes and other assets of automotive brands to simplify their decision-making process (Hsieh 2004). Against this background, this study sets out to validate the CBBE model in the context of the automotive industry. Also, this study examines the differential effects of social media marketing communications on the CBBE of automotive brands and consumer responses.

1.2 Problem Statement

Consumers' perception and responses strongly determine the success of a brand through their purchase or preference of the brand (Godey et al., 2016). However, Godey et al. (2016) lamented that not very many CBBE studies have focused on the consequences of CBBE holistically. Therefore, this study aims to determine the CBBE of automotive brands on consumer responses.

Furthermore, Buil, Martínez and Chernatony (2013) and Gensler, Völckner, Liu-Thompkins and Wiertz (2013) argued that it is imperative to look beyond the purchase intention in explaining consumer responses and behaviors. However, far little studies, especially in the context of social media communications, have focused on brand preference and purchase intention in explaining consumer responses to social media

marketing communications (Lew & Sulaiman, 2014; Villanueva & Hanssens, 2006; Rezaei & Abadi, 2013; Toriman, 2011; Monavvarian, Asgari, & Hoseinabadi, 2015).

The conceptual models of both Aaker (1991) and Keller (1993) have been the most adopted models for measuring CBBE, especially in the context of social media communications (Schivinski & Dabrowski, 2015; Schivinski, 2011; Zailskaitė-jakstė & Kuvykaite, 2013). However, these studies are not without particular limitations. One of the limitations of the extant studies of CBBE is that most of the dimensions adopted for measuring CBBE are not based on empirical research (Baalbaki & Guzmán, 2016). Also, there is a lack of consensus on the universality of CBBE measurements.

Additionally, only a few empirical justifications have been proffered in determining CBBE dimensions in specific contexts and industries (Davcik, Vinhas & Hair, 2015). Keller and Lehmann (2006) added that previous studies on CBBE have not exhaustively revealed all the dimensions of brand equity. Also, recent CBBE studies (e.g. Christodoulides & Chernatony, 2010; Pinar et al., 2014; Davcik et al., 2015) have highlighted the importance of developing industry-based dimensions for measuring CBBE. However, few researchers have focused on developing empirical dimensions for measuring automotive brands (Christodoulides & Chernatony, 2010). Therefore, this study aims to validate the measurements of CBBE for automotive brands empirically.

Furthermore, different approaches have been employed in studying social media communications. However, researchers are yet to consider examining the differential effects of various types of social media marketing communications on CBBE (Yazdanparast, Joseph, & Muniz, 2016). Therefore, there is a knowledge gap in

understanding the differential effects of various types of marketing communications such as Social Media Advertising, Social Media Promotion, Social Media Interactive Marketing and Social Media Word-of-Mouth on CBBE and consumer responses (Dholakia et al., 2004).

Also, Schivinski (2011) argued that the direct effects of marketing communications and CBBE are not enough to explain consumers' response to brand communications and consumers' mindset towards a brand. Additionally, a limited number of studies have focused on the indirect effect of CBBE in explaining the impact of social media marketing communications on consumer response. Therefore, this current study examines the mediating role of CBBE on the relationship between social media marketing communications and consumer response.

Drawing from the above-highlighted gaps, this study focuses on the Malaysian automotive industry -being one of the primary drivers of both economic and socio-cultural developments in Malaysia (Sultana & Amilin, 2014; Socialbakers, 2015)- to contextualize the direct and indirect relationships between social media marketing communication, CBBE and consumer response.

1.3 Research Questions

This study intends to examine the direct and indirect relationships between the Social Media Marketing Communications (including FCC) regarding Social Media Advertising, Social Media Promotions, Social Media Interactive Marketing and UGC which is Social Media Word-of-Mouth on Automotive CBBE and Consumer Responses.

Responses. The following questions guide this study in approaching the highlighted problem statements above:

- i. What are the direct relationships between FCC (Social Media Advertising, Social Media Promotions and Social Media Interactive Marketing), UGC (Social Media Word-of-Mouth) and CBBE of automotive brands?
- ii. What are the direct relationships between FCC (Social Media Advertising, Social Media Promotions and Social Media Interactive Marketing), UGC (Social Media Word-of-Mouth) and Consumer Response?
- iii. What is the direct relationship between CBBE of automotive brands and Consumer Response?
- iv. What are the indirect relationships between FCC (Social Media Advertising, Social Media Promotions and Social Media Interactive Marketing), UGC (Social Media Word-of-Mouth), CBBE and Consumer Response?

1.4 Research Objectives

The objective of this research can be explained in broad terms as an attempt to examine both the direct and indirect relationships between Social Media Marketing Communications, CBBE of automotive brands and Consumer Response. The specific objectives of this study are listed as follows:

- i. To examine the direct relationships between FCC (Social Media Advertising, Social Media Promotions and Social Media Interactive Marketing), UGC (Social Media Word-of-Mouth) and CBBE of automotive brands.
- ii. To determine the direct relationships between FCC (Social Media Advertising, Social Media Promotions and Social Media Interactive Marketing), UGC (Social Media Word-of-Mouth) and Consumer Response.
- iii. To examine the direct relationship between CBBE of automotive brands and Consumer Response.
- iv. To investigate the indirect relationships between FCC (Social Media Advertising, Social Media Promotions and Social Media Interactive Marketing), UGC (Social Media Word-of-Mouth), CBBE and Consumer Response.

1.5 Scope of the Study

The scope of this study tilts substantially towards examining the role of marketing communications disseminated by both brand managers and consumers on social media as important factors for developing CBBE of automotive brands and evoking favorable consumer responses. This study also examines both the direct and indirect relationships between social media marketing communications, automotive CBBE and consumer responses. Additionally, this research validates the measures of CBBE in the context of automotive brands and marketing communications in the context of social media communications. As such, this study adopts a mixed-method research approach, using both qualitative and quantitative research designs. The qualitative method was used to

develop, validate and purify the items used for measuring the constructs understudied in this research. For these purposes, a semi-structured interview was conducted among ten (10) informants, consisting of brand managers and automotive brand and social media users. Furthermore, the survey instrument that was used in this study was validated using seven experts of marketing communications, marketing and research methodology disciplines. A pre-test was also conducted, involving 200 survey respondents. Finally, a survey questionnaire was administered to 800 social media users and users of four different automotive brands in Malaysia. The quantitative data were analyzed using SPSS 23 for cleaning and exploring the data and AMOS 23.0, a Structural Equation Modeling (SEM) software was used for developing the measurement and structural parameters of the proposed model in this study.

1.6 Significance of the Study

This study is of great significance to the body of knowledge in the area of brand management, marketing communications, consumer behavior and social media effect. This study also proffers essential practical recommendations to brand managers and marketing communication practitioners, marketers and so on. The details of the theoretical, methodological and practical significances of this study are presented below.

1.6.1 Theoretical Significance of the Study

The findings of this study significantly demonstrate the importance of marketing communications in the context of social media communications especially for enhancing CBBE and evoking positive responses from consumers. Similarly, studies that have focused on CBBE in the social media realm have adopted different conceptual

models of CBBE in a different context. A few studies have considered how important social media marketing communications to developing CBBE in the automotive industry is. Therefore, the findings of this study provide theoretical insights with regards to developing an industry-based CBBE model that is specifically employable for automotive brands.

Although using social media as a channel for communicating and engaging consumers is arguably full of potentials, yet it is not without some inherent challenges. One of the significant challenges is considering the consequences of the level of freedom in which the social media has offered to consumers in co-authoring brand-related contents and sharing the contents with other consumers in shaping the perception of consumers about brands. The findings of this study provide a productive contribution to the body of knowledge by empirically revealing the implications of UGCs to brand equity development and consumer responses.

Finally, it is also of a great theoretical significance that this study employs the Consumer-Stimulus Responses Model (CSRSM) in explaining the relationships between social media marketing communications, CBBE and consumer responses. In specifics, this research operationalizes the “communication stimulus” in CSRSM as social media marketing communications, “consumer psychology and perception” are operationalized as CBBE and “consumer behavior” is represented with consumer response in the hypothesized theoretical framework in this study. Hence, the findings of this study provide empirical evidence for the explanation of CSRSM in the context of Social Media Marketing Communications.

1.6.2 Methodological Significance

Primarily, this present study offers an invaluable methodological significance by employing a mixed-method research approach using both semi-structured interview and survey designs. In view of the objective of this study with respect to developing an automotive-based CBBE model and contextualizing marketing communications in the domain of social media communications, the methodological approach highlighted by Churchill (1979) is employed in this study for developing and validating the scale measurements used in this study. Hence, this study offers a suitable CBBE model for measuring consumer perception, mindset and attitude towards automotive brands. Similarly, this study also provide validated and purified measurements for measuring consumer responses by incorporating both purchase intention and brand preference.

Furthermore, this research is methodologically significant to the discussion on social media brand communication by incorporating the traditional marketing communications such as; advertising, promotions, interactive marketing and WOM into the purview of social media brand communication. Previously, studies (e.g, Schivinski & Dabrowski, 2015) in this realm have studied brand-related communications by focusing on both FCC and UGC. This research therefore, contextualize FCC as; social media advertising, social media promotion and social media interactive marketing and UGC as social media WOM. By so doing, this study offers practicable scales for measuring the brand-related communications on social media in relation to CBBE development and consumer response enhancement.

1.6.3 Practical Significance of the Study

Practically, this study boosts the understanding of practitioners on the differential effects of marketing communications that are disseminated on social media in developing CBBE and evoking favorable Consumer Response. In specific terms, this research provides empirical justifications to the connection between social media communications as a strategic marketing communication efforts and the development of CBBE and influencing consumer responses. Hence, the findings of this study notify brand managers and media managers the best marketing communications suitable for developing CBBE and enhancing favorable Consumer Responses.

In addition, the findings of this study also signal practitioners who are already users of social media as a marketing communication tool on how to improve their engagements and interactions with consumers on social media. Findings from this study also provide practical contributions that can help practitioners to develop better marketing communications and media strategies suitable for social media and for the purpose of influencing consumer perception of brand assets and enhancing consumer responses. Finally, the result of this study also reinforced the reason for companies and brand managers to continue their investments on social media as marketing strategy for enhancing the acceptance and success of their brands.

1.7 Organization of the Thesis

The reporting of this study is organized in five chapters. Chapter one establishes the background which entails explanation on the two types of social media communications namely FCC and UGC. The chapter also presents brief review on the connection

between Social Media Marketing Communications, CBBE and Consumer Responses. The theoretical, methodological and practical gaps are also highlighted under the problem statements in this chapter. The research questions and objectives are also presented in this chapter. The scope and the significance of this study are discussed in details.

Chapter two entails literature reviews on the key concepts that lay theoretical foundations for this study. The concepts include definition of CBBE, Automotive CBBE, Consumer Responses and social media communications including different types of marketing communications such as; Social Media Advertising, Social Media sales promotion, social media interactive marketing, social media WOM. The chapter also discusses theoretical perspectives that are related with the objectives of this study. The theoretical perspectives of CSRM and its relevance with the objectives of this study are discussed.

Chapter three presents the hypotheses development and the conceptual framework of the study. The conceptual framework is developed as a result of discussions and findings deduced from previous studies. The framework depicts the direct and indirect relationships between the variables that are understudied namely; Social Media Marketing Communications, Automotive CBBE and Consumer Responses. In addition, this chapter describes the methodology, study approach, research design and the methodological framework that are employed in achieving the highlighted objectives in this study. The chapter also present explanations on the population, sample techniques,

sample size and procedures on data collections. This chapter also presents the procedure on instrument development, pilot study, test for validity and reliability.

Chapter four is the analysis chapter where the data collected is analyzed and reported. The chapter entails the details of the analysis techniques and the statistical tools and procedures that are employed in this research and the findings of the analysis conducted from both SPSS and AMOS are presented.

Chapter five is the last chapter. The chapter summarizes all the activities of the study and provides conclusions, recommendations, discussions, limitations, and implications of the study. The chapter presents the conclusions drawn from the study analysis in relation with the hypotheses that are proposed in this study. The conclusions are discussed in a way that are linked to the findings from previous studies and similarities and differences with this present study are discussed.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a detailed review of previous literature with regard to the variables understudied in this research. It presents a rigorous review of the variables which constitute the conceptual framework of this study. Previous empirical findings on the relationship between the variables are reported to justify the development of hypotheses in this research. The chapter ends with a review of the Consumer Stimulus-Response Model (CSRM) being the relevant theoretical perspective adopted to explain the relationship among the variables understudied in this research. Specifically, Section 2.1 presents discussions on the measurement of CBBE. Section 2.2 entails the review of literature on CBBE in the context of automotive brands. In furtherance, Section 2.3 discusses Consumer Response. Section 2.4 discusses social media marketing communications, while Section 2.5 presents a review of previous empirical works on the relationships between social media marketing communications, CBBE and Consumer Response. Section 2.6 explains the theoretical framework of the CSRM being the underpinning theory for the hypothesized framework in this research. Section 2.7 discusses the theoretical framework that is proposed in this research. Finally, Section 2.8 summarizes the chapter.

2.1 Measurement of Consumer-Based Brand Equity

The literature is replete with numerous measurements of brand equity (Hanaysha & Hilman, 2015). Tuominen (1999) argued that different approaches and prisms have been

employed to study brand equity. Such differences resulted into numerous definitions of brand equity, which cannot be captured or represented with one concept or idea. This is evident in the differences in the approaches commonly used by brand equity researchers. However, the most popular perspectives for studying brand equity are; organization/employee perspective, financial perspective and consumer perspective (Farjam & Hongyi, 2015). Keller and Lehman (2006) explained that brand equity is an accumulation of values generated from three market levels; company, customer and financial markets. Each market level represents the purpose of the perspectives that are employed or the models and definitions that are developed to study, measure and explain brand equity.

As illustrated in Figure 2.1 below, these perspectives (market levels) have different influences on the definitions, interpretations and dimensions used in measuring brand equity. For instance, Consumer-Based Brand Equity (CBBE) is an offshoot of brand equity conceptualized for measuring brand equity in the consumers' perspective (Tuominen, 1999; Hsieh, 2004). The consumers' perspective focuses on understanding the consumers' mindsets, attitudes and decision-making processes as the basis for evaluating and judging the attributes and performance quality of brands (Keller, 2001).

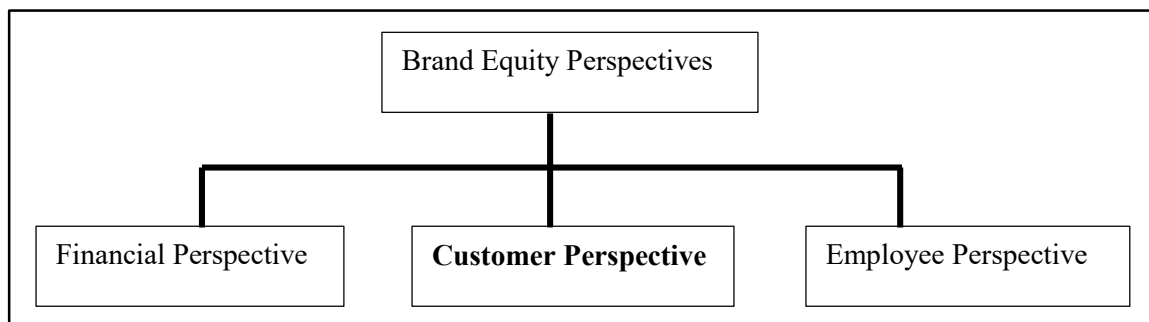


Figure 2.1. Brand Equity Perspectives (Farjam & Hongyi, 2015)

In the consumer perspective, brand equity is explained as the positive and favorable impact of consumer mindset and perception of a product and service, as well as the consequential effect on consumer responses and behavior (Pinar et al., 2014). Brand equity in this perspective is developed and enhanced through coordinated management and marketing activities, which often include advertising and other marketing communications. CBBE is a perfect model for describing brand equity in this context (Keller, 2001). Therefore, the literature review in this study focuses more on CBBE, as it is more relevant to the context of this study. This is because the financial perspective of brand equity refers to the incremental cash flow that branded products or services received compared to similar not branded products (Johansson et al., 2012; Koçak et al., 2007; Wang, 2010). Meanwhile, employee perspective refers to the internal activities and operations that are maintained to standardize the process of manufacturing branded products. Meanwhile, the consumer perspective of brand equity emphasizes the relationship between consumers and firms (Schivinski & Dabrowski, 2015; Yoo et al., 2000; Morra et al., 2018).

Measuring CBBE refers to examining and understanding everything that exists in consumers' minds with regards to a brand. Consumers' mindsets can be in the form of feelings, experiences, images, perceptions, beliefs, attitudes and thoughts about the performance and utility of brands (Keller, 2001). CBBE has been measured with a variety of conceptual models using different dimensions. The most popular dimensions are brand awareness, perceived quality, brand image, brand preference, brand loyalty, brand attitude and brand associations. The stream of literature in this realm rely extensively on the conceptual model of Aaker (1991), which proposed four dimensions;

brand loyalty, brand awareness, perceived quality and brand associations. The brand knowledge model however dimensioned CBBE into brand awareness and brand image, as propounded by Keller (1993). The following section presents detailed explanations on the measurement of CBBE.

CBBE is a branch of the broad concept of brand equity (Farjam & Hongyi, 2015) (See Figure 2.1). CBBE, which is also referred to as customer-brand equity or audience-based brand equity (Netemeyer et al., 2004; Keller, 2001; Xu & Chan, 2010), is the commonplace perspective among advertising and marketing communications researchers for determining the success of their branding efforts (Keller, 2001; Xu & Chan, 2010). This is so because the premise of CBBE revolves around the consumer's mindset and perception of a brand, through which the effectiveness and importance of marketing strategies and activities (such as advertising, promotions, sponsorship and marketing communications) are assessed (Tuominen, 1999; Keller, 2001; Christodoulides & Chernatony, 2010; Keller, 2009).

Additionally, CBBE can be explained with the level of the consumer's acceptance of a product or a company, which is itself based on the attributes of the product (Brown & Carpenter, 2000; Broniarczyk & Gershoff, 2003; Chandon, 2003). According to Baalbaki and Guzmán (2016), CBBE can be defined as the consumer's mindset or perception of a product's or a company's quality, preference, sustainability and social influence. Similarly, (Keller, 2001; Netemeyer et al., 2004) concluded that CBBE signifies the consumer's familiarity and favorable, positive and strong perception of a product. In other words, brand knowledge is developed in consumers' memories through

consumers' evaluation of marketing communications and advertising messages (Keller, 2001; Netemeyer et al., 2004).

Keller (1993) defined CBBE as brand knowledge, which is of two types; brand awareness and brand image. Brand awareness and brand image are often referred to as the structures of the consumer's mindset, memory, perception and association with a brand (Christodoulides & Chernatony, 2010; Keller & Lehman, 2006). In summary, CBBE mirrors the consumers' knowledge of brands and their experiences acquired while associating with such brands. It also represents consumers' mindsets and perceptions of brands (Aaker, 1991; Keller 1993; Keller, 2001).

According to Keller (1993), the implication of CBBE (brand knowledge) can either be positive or negative. Christodoulides et al. (2006) further explained that positive CBBE occurs when consumers' perceptions are strong, unique and favorable and vice versa. This notion is justified by the fact that the conceptualization of CBBE is theoretically rooted in cognitive psychology, which focuses on the memory structure of customers (Keller, 1993; Christodoulides & Chernatony, 2010; Farjam & Hongyi, 2015). Therefore, the type of knowledge - such as brand name, logo and country-of-origin - that consumers have about a brand and the nature of their experiences and associations with a brand are saved in their memories, and are further used to form perceptions of the brand.

Ailawadi et al. (2003), Baalbaki and Guzmán (2016), Boo et al. (2009), Christodoulides and Chernatony (2010) and Tuominen (1999) unanimously added that the underlying purpose of conceptualizing CBBE are; to enhance tactical and strategic decisions on

marketing activities, to determine the strength of a brand, to measure the success of marketing decisions, to determine the financial consequence of brands and to develop successful brands. Invariably, all of these purposes are the driving motivations for the maintenance of CBBE measurement on the top of the priority scales of researchers (Tuominen, 1999).

The literature is replete with studies on the measurement of CBBE (Baalbaki & Guzmán, 2016; Christodoulides & Chernatony, 2010; Christodoulides et al., 2006; Tuominen, 1999). These studies unanimously opined that there are two contemporary approaches to measuring CBBE; the direct and the indirect approaches. Christodoulides and Chernatony (2010) explained that the direct approach of measuring CBBE entails examining the overall and direct impact of CBBE drivers on different marketing activities. Hsieh (2004) maintained that both the indirect and direct approaches are supplementary by implication. This is because the direct approach determines how marketing communication efforts determine performance, while the indirect approach elucidates the essence of building and managing brands through the responses and behaviors of consumers. For instance, various dimensions of CBBE such as brand awareness, brand image, associations, perceived quality, brand sustainability and others can be employed to examine the impact of CBBE on consumer responses (purchase decisions or price premiums) (Schivinski & Dabrowski, 2014).

Christodoulides and Chernatony (2010) concluded that there is no universally acceptable model for measuring CBBE. For instance, Christodoulides et al. (2006) developed five dimensions of Online Retail/Service (ORS) brand equity. According to

the findings of Christodoulides et al. (2006), the dimensions of CBBE are emotional connection, online experience, responsive service nature, trust and fulfillment. A study conducted by Teck Ming, Tze Wei, Lee, Ong, and Su-Mae, (2012) demonstrated that the dimensions of measuring CBBE in service shops are; tangibles, responsiveness, empathy, assurance, recovery and knowledge. More recently, Baalbaki and Guzmán (2016) developed four dimensions for measuring CBBE based on consumer perceptions. The study concluded that perceived quality, perceived value, brand preference and sustainability are the customer-perceived dimensions of CBBE.

The literature is also brimful with different types of models and methodologies for measuring CBBE. Many of the available models were developed conceptually while few others were empirically developed (Baalbaki & Guzmán, 2016). Although most of the models that were empirically developed validate the Aaker's and Keller's conceptual models (Pappu, Quester, & Cooksey, 2005; Boo et al., 2009), the body of knowledge on CBBE is yet to reach a unanimous conclusion over the measurement of CBBE (Boo et al., 2009), especially across industries and contexts.

However, in line with the empirical studies that have been done on CBBE, it can be succinctly defined as consumers' knowledge (awareness and image), mindsets, judgments and perceptions of the attributes, qualities and performances of a brand (Verhoef, Langerak, & Donkers, 2007; Christodoulides & Chernatony, 2010). The review of previous studies on the measurement of CBBE revealed that to ensure the accuracy of any model for measuring CBBE, the research context, market sector, product category and pertinent industry must be taken into cognizance (Farjam &

Hongyi, 2015). In addition, one of the underlying significances of measuring CBBE is to determine the effectiveness of the elements of the marketing activities (Farjam & Hongyi, 2015), and assessing the consequences such as consumer responses and behaviors (Ailawadi et al., 2003; Baalbaki & Guzmán, 2016; Christodoulides & Chernatony, 2010; Farjam & Hongyi, 2015; Yoo & Donthu, 2001).

2.2 Consumer Based-Brand Equity in the Context of Automotive Brands

Developing and managing brand equity continue to gain more attention from researchers and practitioners in different industries and business sectors (Davicik et al., 2015); the reason the body of literature on brand equity and brand management is enormous. However, these studies are not without limitations. Among the major limitations is a lack of consensus on the universality or generalizability of CBBE measurements. Also, only few empirical justifications have been proffered on brand equity dimensions in specific contexts and industries (Keller, 2001). Subsequently, the current trend among CBBE researchers is developing industry-based or context-based CBBE measurements. This new trend is important because brands are important factors in the decision-making process and customers particularly serve as the basis for accepting or rejecting brand choices (Keller, 2001). However, the decision-making process of consumers towards the selection of brands varies, especially across low and high involvement brands. This is why there have been recurring calls for contextualizing the measurement of CBBE for specific contexts and industries (Çifci et al., 2016).

Brands represent consumers' perceptions and mindsets about a product, and their performances are based on consumers' judgments of the hedonic and functional

attributes of products. These attributes cannot be similar across industries because different products serve different purposes. Consumers' judgments of products' attributes are also expected to differ. For example, what consumers take seriously or consider to be very important in evaluating high-involvement products like automotive products cannot be the same with low-involvement products such as soft drinks, more reason developing industry-based dimensions for measuring CBBE is important (Pinar et al., 2014; Brunello, 2015).

A review of CBBE literature revealed that a few studies considered empirically developing measurements or dimensions of CBBE which are relevant to attributes of automotive brands, which also play important roles in consumers' evaluation and judgment of car brands (Hsieh, 2004). However, majority of CBBE studies found in the context of automotive industry adopted/adapted the general measurements drawing from the conceptual models of Aaker and Keller of CBBE (Hsieh, 2004).

Chattopadhyay, Shivani and Krishnan (2009), Chattopadhyay, Dutta, and Sivani (2010), Santoso and Cahyadi (2014), Chiu, Yin, and Jessica (2015), Hanaysha (2015), Mahfooz, (2015) are examples of studies which adopted the Aaker's and Keller's CBBE model and focused on various dimensions of CBBE such as brand awareness, perceived quality, brand loyalty, brand image, brand awareness and brand leadership of automotive brands. These studies commonly focused on the influence of brand equity on consumer responses and behaviors in terms of purchase, repurchase and brand preference and brand retention.

Similarly, Thiripurasundari and Natarajan (2011) and Mkhitarian (2014) adapted the Keller's CBBE model to examine the determinants of brand equity of automotive brands. Brand knowledge, brand application and brand relationship were reported as important and significant factors that affect brand equity in the context of automotive brands. Kiyani, Niazi, Rizvi and Khan (2012) also demonstrated that both brand trust and customer satisfaction significantly influence customers' loyalty to car brands and repurchase of car brands. The items for measuring the dimensions of CBBE by these studies were adapted from the general brand equity studies and were reworded to suit the performance or attributes of automotive products.

Brunello (2015) is one the few studies that empirically developed dimensions for measuring automotive brand equity. According to Brunello (2015), behavioral loyalty, which includes both brand personality and consumer personal traits, is the main factor that influences consumer purchase decision of automotive brands. Measures of brand personality were adopted from conventional brand equity studies and the big five model was adopted for consumer personality traits. After going through the multi-item development stages, it found that refinement, competence and enthusiasm represent brand personality while agreeableness, openness and extraversion are acceptable measures of consumer personality. The findings of Davcik et al. (2015) can be accommodated in the contemporary CBBE theory because behavioral loyalty (brand personality and consumer personality) aligned with psychological benefits - in other words known as hedonic brand image - which is one of the two bases for measuring and developing brand equity. However, their measurements do not incorporate the

functional utility factors and functional brand image, which are integral for consumers' evaluation of automotive brands (Davicik et al., 2015).

According to Keller (1993), consumers' mindsets and perceptions emanate from either functional (product-related) or hedonic (non-product related) attributes. Drawing from this theoretical basis and the pool of previous literatures, especially when considering the level of inconsistency in the variety of dimensions that have been adapted to measure automotive brand equity (Zhang, Bu, Wu, & Xie, 2011), this study measures CBBE of automotive brands with the following dimensions: Brand Awareness, Functional Brand Image, Hedonic Brand Image and Brand Sustainability.

The dimensions of CBBE are usually justified with their level of importance in the context or the industry in which brand equity is measured. For instance, Bruhn et al. (2012) exceptionally adapted Brand Awareness, Functional Brand Image and Hedonic Brand Image as the dimensions of CBBE while focusing on three industries; tourism, telecommunication and pharmaceutical industries. The measurement of CBBE by Hsieh (2004) focused mainly on brand knowledge - which reflects the consumer's perception of product attributes and the consumer's attitudes - leaving out the factor of brand associations (Hsieh, 2004). As a result, this study adapts the measurement of CBBE proposed by Bruhn et al. (2012) and Baalbaki & Guzmán (2016) from the consumers' perspective. The following sections present the conceptualization of the dimensions of Automotive CBBE measurement as proposed in this study.

2.2.1 Brand Awareness

Brand awareness is defined as the easy and spontaneous occurrence of a particular brand in the memory of a consumer when thinking of buying or engaging with a category of brands (Keller, 2009). Keller (1993) added that the consumer's ability to identify and remember a particular brand by connecting its features with the values of the brand at a needed time is a distinguishable level or type of brand knowledge. Brand awareness is one of the main dimensions of brand knowledge (Keller, 2009).

Brand awareness reflects how well consumers know the identity of a brand, which can be reflected through the knowledge and recognition of the name, logo and other brand elements of a particular brand. Brand awareness fundamentally depicts the presence and success of a brand in the consumer's memory (Aaker, 1991). In other words, brand awareness implies consumers' acquaintance with a brand and their recognition of the brand's reputation in the consumers' memory (Mahfooz, 2015; Santoso & Cahyadi, 2014). Hence, brand awareness is measured to determine how consumers differentiate a brand from its competitors (Mahfooz, 2015; Santoso & Cahyadi, 2014).

Brand awareness is one of the most important and common dimensions of CBBE models (Bonhomme et al., 2010; Christodoulides et al., 2012; Kim & Ko, 2012; Chieng & Lee, 2011). According to Keller (1993), brand awareness is measured with both brand recall and brand recognition. The measurements of brand awareness reflect the definition of brand awareness with regards to consumers' ability to recognize and remember a particular brand by heart (Keller, 1993). Furthermore, Pappu, Quester and Cooksey (2005) and Cui (2011) concurred that brand recall is explained by the ability of

the consumers to remember and connect the brand's elements, such as name, logo and color with the value, performance and functional attribute of the brand (Chieng & Lee, 2011; Alam & Anis, 2016; Mahfooz, 2015; Santoso & Cahyadi, 2014). Hence, brand recall is explained by how fast and easily consumers can locate the category of a brand by heart without any clue. This is sometimes referred to as unaided recall of a brand.

Similarly, brand recognition and top-of-mind have been used to determine consumers' awareness of the assets, strengths and characteristics of a particular brand (Santoso & Cahyadi, 2014). Brand recognition basically explains consumers' recognition of the assets or features that are directly or indirectly related to a brand. These include logo, slogan, tagline, symbol and structure of the brand. The level of consumer recognitions of these brand elements informs the importance and level of awareness of the brand in the consumer's memory (Santoso & Cahyadi, 2014).

In the context of automotive brands, Yoo and Donthu (2001) operationalized brand awareness as consumers' recognition and recall of the logo, name and characteristics of a car brand among other competing brands. The measurement of brand awareness for automotive brands is in line with the general measurement of brand awareness as validated by Yoo and Donthu (2001). Mahfooz (2015) added that awareness of brand personality is one of the measures of brand awareness for automotive brands. Similarly, the study highlighted how consumers' awareness of the personality of an automotive brand can influence consumers' purchase decisions.

2.2.2 Functional Brand Image

Brand image fundamentally describes the consumers' associations with a particular brand (Keller, 1993). Brand image basically represents consumers' confidence in a brand. The higher the confidence consumers place on a brand, the higher their willingness to pay for that brand (Hsieh, 2004). Brand image is generated through associations which can be categorized into attributes, attitudes and benefits (Hsieh, 2004). A plethora of dimensions have been employed by previous CBBE studies to explain consumers' perception of brand image in terms of the favorability, strength, and uniqueness of a brand (Campbell, 2002).

These dimensions for measuring brand image can be categorized into two types; Functional Brand Image and Hedonic Brand Image. Both of these categories determine consumers' likability and conviction towards a particular product (Campbell, 2002). Hsieh (2004) added that brand image is explained with consumers' perceptions and attitudes towards a brand. Consumers' perceptions are generated through the product-related and non-product-related attributes (Hsieh, 2004). For instance, Zhang (2015) emphasized that the consumer's perception of a brand stems from five different levels of satisfaction; satisfaction on brand's functionality, the social image associated with purchasing or owning the brand, the recognition and sentimental attachments to the brand, the balance between the brand's value and its functionalities and lastly, the consumers' trust in the brand. Thus, the common measures of brand image cut across functional and hedonic images of the brand in consumers' minds.

In the same vein, Park and Srinivasan (1994) opined that brand image signifies consumers' associations with a brand. These associations can be divided into two types; the associations that are related to a brand's attributes, known as the functional brand image; and the associations that are not related to a brand's attributes, which are otherwise known as hedonic brand image (Park & Srinivasan, 1994). Similarly, Homer (2008) argued that consumers' perception towards a brand can be distinguished in terms of its connection to either the functionalities, attributes and performance of the brand, or the abstract and imaginative convictions that are unrelated to the performances or the values of the brand.

Functional brand image refers to brand meaning, perception and impressions of consumers that are related to the functional attributes, quality and performance of a brand (Homer, 2008; Bruhn et al., 2012). Chedi (2008) explained that functional brand image basically refers to the consumer's perception of the functionality, quality and reliability of a brand's performance. Ailawadi et al. (2003) added that functional brand image refers to the consumer's perception and evaluation of a brand based on the instrumental, functional and task-related value of the brand. Hence, functional brand image has to do with what consumers perceive or think a brand can do or cannot do.

Theorists unanimously believed that functional brand image explains consumers' evaluation of a brand in a way that has to do with the performance and utilitarianism of the brand. For instance, consumers evaluate a brand based on its convenience, cost effectiveness, benefits and quality (Ailawadi et al., 2003). Bruhn et al., (2012) in measured functional brand image with constructs such as; practical, sensible, necessary

and functional. Impliedly, the terms used in measuring functional brand image are directly related to the attributes, values and functionality of the brand.

Drawing from studies that have examined consumers' attitudes and associations of automotive brands, functional brand image of automotive CBBE must include dimensions such as; perceived quality (Alam & Anis, 2016; Chattopadhyay et al., 2010; Chiu et al., 2015; Kiyani et al., 2012; Mahfooz, 2015; Murtiasih & Siringoringo, 2013; Santoso & Cahyadi, 2014; Thiripurasundari & Natarajan, 2011; Verhoef et al., 2007), customer satisfaction (Fetscherin & Toncar, 2009), product attributes (Thiripurasundari & Natarajan, 2011) and brand application (Thiripurasundari & Natarajan, 2011).

Kartono and Rao (2005) examined the connection between consumer perception (perceived quality and satisfaction) and financial measurement of brand equity (market performance). It was argued that perceived quality is an important dimension of CBBE because it explains consumers' expectations of the characteristics, performance and reliability of automotive brands. Meanwhile, consumer satisfaction reflects consumers' experiences and associations with automotive brands. Even though Kartono and Rao (2005) measured consumer perception of automotive brands through the data extracted from automobile review websites, the items used in measuring both perceived quality and customer satisfaction are directly relevant with the functionality of automobile products and truly depict specific consumers' mindsets and judgments. For example, perceived quality was measured with items that are related to the car engine, body, transmission and ignition, while consumer satisfaction was measured with items that are related to driving, comfort and interior features of cars.

While examining the extent to which price and price premium affect consumers' purchase behavior through brand equity, Fetscherin & Toncar (2009) operationalized brand equity as product attributes and specifically focused on car attributes that are relevant to the performance of car brands. These include chassis or trunk, interior, comfort, engine, driving characteristics, safety, environment and economics. Similarly, while examining the factors that determine brand retention and dealer retention across different types of car brands, Kartono and Rao (2005) developed items that are specifically related to the functional attributes of cars to measure brand quality. The items reflect the functionality of the engine, comfort, safety and body design of car brands. The measures listed above will guide the adoption of measurements for functional brand image of automotive brands in this study.

2.2.3 Hedonic Brand Image

Hedonic brand image explains consumer perception of non-functional attributes of brands. This signifies how brands are perceived and held in consumers' minds (Bruhn et al., 2012). Yasin et al. (2007) concluded that the true meaning of a brand exists in consumers' minds and it is formulated by consumers' knowledge, feeling, experience or social influence. The perception a consumer holds towards a brand affects the consumer's attitude towards the brand.

Hedonic brand image can be explained as the perceptions, feelings, or meanings consumers create from abstract or imaginary considerations that are not necessarily related to the functional or physical attributes, performance and utility of the brand (Homer, 2008; Bruhn et al., 2012). In fact, Homer (2008) argued that hedonic brand

image is also referred to as non-attribute brand belief, which explains how consumers personify the symbolical representation of a brand. For instance, when consumers perceive Mercedes Benz as a prestigious automotive brand, such perception obviously reflects emotional attachments to the brand's hedonic image and obviously not functional image. Campbell (2002) opined that hedonic brand image is a non-functional type of belief consumers hold about a brand, which makes the brand distinctive and strong. These beliefs are formulated beyond the quality, performance or product-related attributes. Rather, hedonic brand image is generated from the intangible properties of a brand.

Mathews, Ambroise and Brignier, (2009) argued that understanding the role of hedonic image on consumer behavior and most specifically purchase intention of a brand is important because the hedonic brand image of a brand offers a better understanding of consumer mindset and behavior by revealing the multisensory, fantasy and emotional aspects of brand usage and associations (Homes, 2008).

In addition, Batra and Homer (2004) argued that hedonic properties such as aesthetic attributes of a product in terms of appearance, shape, color and size influence consumers' decision-making processes, as these attributes inform consumers about the functional characteristics of the product and influence consumers to have favorable impressions of such products.

In spite of the fact that only few CBBE studies have included hedonic image as part of the measures of CBBE (Batra & Homer, 2004), the myriad of dimensions, including brand association (Brunello, 2015; Verhoef et al., 2007; Baalbaki & Guzmán, 2016),

brand personality (Hanaysha & Hilman, 2015), social image (Jalilvand & Samiei, 2012), brand leadership (Jalilvand & Samiei, 2012), and brand image (Jalilvand & Samiei, 2012) fall under the purview of the definitions of hedonic brand image (Bruhn et al., 2012). Justifiably, Homer (2008) adopted items such as fun, exciting, enjoyable, thrilling and delightful to measure hedonic brand image. In the same light, Bruhn et al., (2012) employed items such as attractive, desirable, strong in character and strong in personality for the measurement of hedonic brand image in their study. Similarly, Baalbaki and Guzmán (2016) operationalized social image as consumer perception of how brands improve social acceptance and social approval.

In the context of automotive brands, Brunello (2015) and Seyfang (2005) measured brand personality as fashionable, stylish, quality reputation, desirable, modern, secure and courageous. Additionally, (Oliveira & Sullivan, 2012) measured the personality of car brands with certain attributes, which include well-known, fashionable, attractive, classy, market leader, successful, corporate, fast, reliable, secure, up to date with trends, courageous and modern. These measures will be employed for measuring hedonic brand image in this study.

2.2.4 Brand Sustainability

Sustainability is generally defined as the determination and consciousness of an organization to manufacture products that are ethically, socially, financially and environmentally responsible (Lehner & Halliday, 2014). Sustainability issues are increasingly becoming important in the academic and corporate discourses nowadays. Brand managers and brand researchers have been paying attention to brand

sustainability by highlighting the sustainability features of their brands, knowing that consumers' perceived sustainability can improve the images of their brands. In fact, Oliveira and Sullivan (2012) argued that brands are suitable platforms for organizations to showcase their sustainability consciousness. This is because consumers are favorably disposed to sustainable brands and believe that sustainable brands can support their aspirations to live more sustainable lives (Speed & Thompson, 2000).

Sustainability is particularly pertinent to the automotive industry. This is because the production of cars with clean and health-friendly technologies has been the top priority of most automotive companies in recent times (Speed & Thompson, 2000). The issue of sustainability is broad and cannot be exclusively solved by one brand or one industry. Hence, brands are expected to focus on the sustainability issues that are pertinent to their industry (Speed & Thompson, 2000). Oliveira and Sullivan (2012) explained that safety, environmental friendliness, green technology and technology innovativeness are among the factors consumers consider important in making purchase decisions nowadays. Therefore, in this study, economic sustainability and environmental sustainability are considered the most relevant sustainability issues in the automotive sector.

A report presented by Carbon Trust, which is a United Kingdom-based consultancy that deals with the reduction of carbon emissions, revealed that social and environmental concerns affect consumer behavior (Oliveira & Sullivan, 2012). Similarly, Simmons and Becker-olsen (2006) demonstrated that social responsibility increases CBBE. Hence, consumers are favorable to products that are economically, socially and environmentally sustainable. In view of the importance of sustainability to automotive brands, this study

includes brand sustainability among the determinants of automotive brand equity, focusing on both economic and environmental brand sustainability. According to Baalbaki and Guzmán (2016), consumers' perceived sustainability is a significant factor for measuring CBBE. As such, environmental sustainability is referred to as consumers' judgments and perceptions of a brand's mindfulness and responsibility to safety, health and environmental sustainability. Economic sustainability refers to consumers' perceptions and beliefs about the financial impacts of maintenance, affordability and upkeep of an automotive brand.

2.3 Consumer Response

Previous studies on brand equity have asserted that there two major phases to explaining CBBE ; the attitudinal phase and the behavioral phase (Farjam & Hongyi, 2015; Tuominen, 1999). The attitudinal aspect of CBBE explains the consumer's perception, mindset and of course, attitude towards a product (Keller, 2009). Meanwhile, the behavioral aspect of CBBE explains consumers' reactions, responses and behaviors (Keller, 2009). Numerous studies have empirically demonstrated that the attitudinal aspect of brand equity significantly leads to behavioral aspect (Mirabi, Akbariyeh, & Tahmasebifard, 2015). The behavioral aspects are also known as consumer responses (Godey et al., 2016). However, consumer response is relevant to this study because it mirrors the types of consumers' behaviors that are aroused by the appeals of marketing communications messages and consumers' knowledge, perception and attitude, otherwise known as the attitudinal aspect of CBBE (Baalbaki & Guzmán, 2016).

A review of previous studies has shown that consumer response has been studied on a piecemeal basis (Cobb-Walgren et al., 1995). However, it is important now than ever to focus holistically on how social media marketing efforts and building successful brand equity influence consumers' purchase behavior (Cobb-Walgren et al., 1995) and consumers' preference attitudes (Cobb-Walgren et al., 1995). Brand preference and purchase intention are the most explanatory factors of consumer responses to successful brand equity and marketing communications (Cobb-Walgren et al., 1995). In view of this, purchase intention and brand preference are adopted as the dimensions of consumer response in this study.

Purchase intention is defined as the possibility of a consumer making a purchase of a product (Anselmsson, Bondesson, & Johansson, 2014; Buil, Martínez, et al., 2013b; Cobb-Walgren et al., 1995; Hoeffler & Keller, 2003; Mirabi et al., 2015; Monavvarian et al., 2015; Prasad et al., 2014). Anselmsson, Bondesson, and Johansson (2014), Buil, Martínez, et al. (2013b), Cobb-Walgren et al., (1995), Hoeffler and Keller (2003), Mirabi et al. (2015), Monavvarian et al. (2015) and Prasad et al. (2014) defined purchase intention as the conscious plan and effort of a consumer on purchasing a brand. The consumer's intention to purchase a brand after being persuaded by the messages and contents of marketing communications is regarded as a measurement of the effect of the marketing communications effort (Buil, Martínez, et al., 2013a). The effect of communications, especially the ones that are deployed on social media such as *Facebook* and *Twitter* can either be negative or positive on consumers' intention to purchase a brand (Horn & Salvendy, 2006). Also, positive CBBE are developed to influence consumers' purchase intention and decision (Hoeffler & Keller, 2003).

Purchase intention refers to consumers' willingness to purchase and repurchase a particular brand (Lew & Sulaiman, 2014). Brand purchase intention is said to be a consequential effect of CBBE (Kim & Ko, 2010). Hence, purchase intention is an attitudinal and behavioral function that implies the consumer's knowledge and perception of the brand. Purchase intention mirrors the consumer's attitude and reflects his knowledge (Keller, 2009) and perception of a brand (Xu & Chan 2010; Chieng & Lee, 2011). In addition, the key role of CBBE is also reflected by the positive effect it has on consumers' brand preferences (Maoyan et al., 2014). Empirical studies have demonstrated that successful brand equity enhances consumers' preferential evaluations, which are reflected through purchase intentions (Maoyan, Zhujunxuan, & Sangyang, 2014).

Consumers go through the process of knowledge search about the performance, functionality, image of a brand before making their decisions to purchase or not (Bruhn et al., 2012). Hence, consistent with the outline of this study, social media is considered a significant channel for consumers to search and get knowledge about brands before making up their minds to purchase (Bruhn et al., 2012).

On the other hand, brand preference is a type of consumer response which reflects how CBBE and social media marketing communications can make a brand become consumers' first choice, mirror consumers' loyalty and stimulate highly committed purchase behavior. Brand preference can stimulate consumers not to buy other brands when their preferred brand is not available (Moradi & Zarei, 2011). Previous empirical

findings have demonstrated the significance of brand preference as the consequence of brand equity development (Tolba & Hassan, 2009; Vinh & Huy, 2016).

Brand preference is the bias of a consumer towards choosing a particular brand among other alternatives, based on characteristics of the brand or the satisfaction, value and quality provided by the brand (Tolba & Hassan, 2009; Vinh & Huy, 2016). In other words, brand preference explains consumers' behavior of rewarding brands for their good service. It is common for consumers to prefer a brand that gives satisfaction or has a successful brand image and equity (Tolba & Hassan, 2009; Vinh & Huy, 2016), hence the reason brand preference is measured by consumer preference of focal brands against other alternatives (Kaplan & Haenlein, 2010).

2.4 Social Media Marketing Communications

Social media marketing communications take different forms and serve different purposes for different consumers (Piskorski, 2011). For example, advertising is a more creative and entertaining type of marketing communication which is used to disseminate brand related-information, increase awareness and evoke brand purchase. Meanwhile on the contrary, sales promotion refers to offering price discounts, coupons, gifts to enhance product trails (Keller, 2009). Past studies, have shown that consumers evaluate social media communications differently. Also, the essence of social media communication is reflected through the characteristics of the contents (Kapoor & Kulshrestha, 2013). However, a handful number of studies on social media communications have focused mainly on two types namely; Firm-Created Contents (FCC) and User-Generated Contents (UGC). The following sections present the

discussions on Social Media Advertising, Social Media Promotion, and Social Media Interactive Marketing for FCC and Social Media Word-of-Mouth for the exemplification of UGC.

2.4.1 Social Media Advertising

Social media advertising refers to any form of content that are posted or shared on either fan pages or general social media walls (Keller, 2009). Social media advertising is an important brand communication tool that can be used to promote ideas, goods or services (Keller, 2009). Substantial amounts of marketing efforts across industries are exerted on advertising for the purpose of building successful brands (Chi, 2011; Okazaki & Taylor, 2013). This is because advertising helps to create strong brand awareness in terms of brand recognition and recall (Mizik & Jacobson, 2003). Advertising is also used to popularize brands and evoke various types of brand associations in consumers' memories (Mizik & Jacobson, 2003). In essence, brand managers strategically depend on advertising to create equity, because of its ability to establish a unique image for differentiating a brand from other competing brands (Bruhn et al., 2012). Also, the intensity of investment in advertising - in addition to creating a favorable brand name - can also serve as a repellant for competitors to enter an advertising-intensive market (Bruhn et al., 2012).

Social media has been an effective platform for disseminating advertisements (Bruhn et al., 2012). Hence, the advertisements deployed on social media are otherwise referred to as social media advertising. Social media advertising is important in building successful brands because repeated and frequent exposure to advertisements increases the chances

of brand recognition and brand recall in consumers' minds (Yoo et al., 2000). Similarly, Okazaki and Taylor (2013) and Cortés and Article (2009) noted that advertising is used to create additional value for brands across industries, especially considering the recent predominance of social media. In addition, Yoo et al. (2000), Buil, de Chernatony, et al. (2013) and Ghorban (2012) found that advertising is an effective tool for increasing customer loyalty, creating brand awareness and reinforcing other brand-related associations and attitudes, which subsequently lead to successful and favorable brand equity in consumers' memories.

While examining the effect of the marketing mix including advertising on brand equity, Yoo et al. (2000) considered advertisement intensity, cost and frequency of advertisement campaigns as the determinants of advertising spending. Similarly, Cobb-Walgren et al., (1995) determined long-term effectiveness of advertising through brand equity development while focusing on 10 years of spending on advertising. In as much as the studies conducted by Yoo et al. (2000), Buil, de Chernatony, et al. (2013), Chu and Keh (2006) and Martínez, Montaner, and Pina (2009) have offered constructive insights into how perceived advertising spending contributes to the development of brand equity from the consumers' perspective, it can be argued that the consumer's perception of advertising spending might not be the rightful determinant of how advertisement affects consumer behavior. In other words, the appeals of advertisements are what matters (Bronner & Neijens, 2006; Malthouse, Calder, & Eadie, 2003), rather than the spending on such advertisements (Boateng & Okoe, 2015; Chu, Kamal, & Kim, 2013; Edwards, Li, & Lee, 2002; Jaskani, 2015; Karson, McCloy, & Bonner, 2006).

In contrast, consumers' experiences and attitudes towards advertisements are perfect for explaining consumers' mindsets and perceptions of the advertisements they are exposed to, which subsequently inform how consumers react towards the advertised brands (Boateng & Okoe, 2015; Chu, Kamal, & Kim, 2013; Edwards, Li, & Lee, 2002; Jaskani, 2015; Karson, McCloy, & Bonner, 2006). This implies that consumers' attitudes and experiences towards advertisements will lead to favorable perceptions of the advertised brand and positive consumer responses (Jang & Chen, 2013; Boateng & Okoe, 2015; Keller & Lehman, 2006; Keller & Lehmann, 2003).

Bronner and Neijens (2006) adopted the media context research approach to determine consumers' advertising experiences of various media, including online advertisements. The authors measured advertising experience against consumer perception of information, transformation, negative emotion stimulation and practical use of the advertisement contents. Bronner and Neijens (2006) found in their study that perception of information and irritation are the most common advertising experiences of online advertising. In addition, Buil, de Chernatony, et al. (2013) determined advertising attitude in terms of the creativity, originality and difference from other brand's adverts. The approaches of Buil, de Chernatony, et al., (2013), Valette-Florence, Guizani, and Merunka (2011) and Okazaki and Taylor (2013) would be adapted for measuring social media advertising attitude and experience in this study.

2.4.2 Social Media Promotion

Promotion is one of the most common and effective marketing communications, and it is employed for building brand equity and generating sales (Okazaki & Taylor, 2013).

Sales promotions that are deployed on social media are referred to as social media promotions. With the recent predominance of social media as a marketing platform, social media has become an important vehicle for promotional (Okazaki & Taylor, 2013) and marketing activities (Karamian et al., 2015; Kim & Ko, 2012). For instance, Shen and Bissell (2013) conducted a content analysis study of six cosmetic brands in the USA. The findings revealed that posts relating to sharing coupons, discount codes, product trials and giveaways are types of sales promotions, among other marketing techniques that are used on *Facebook*.

Similarly, Taecharungroj (2016) affirmed that store promotion, product promotion and campaign promotion are the major types of marketing communications that are shared on social media. Offering sales promotions in the form of price deals, product trials, promotions and incentive announcements are essential to the development of brand equity (Keller, 2009). In essence, social media promotion is usually in the form of promotional incentives, which include price deals that are deployed on social media to evoke purchase and/or product trials (Keller, 2009).

Sales promotion researchers have asserted that sales promotions can be categorized into two types; monetary and non-monetary sales promotions (Buil, de Chernatony, et al., 2013). Monetary sales promotions relate to using and offering price discounts and coupons, while non-monetary sales promotions refer to offering gifts and product trials. Chi (2011) revealed that these two types of sales promotions have different implications on sales and brand equity. The monetary type is found to have a negative relationship

with brand equity, while the non-monetary type's effect on brand equity is found to be positive (Chi, 2011).

2.4.3 Social Media Interactive Marketing

Interactive marketing is one of the major types of social media marketing activities and communications anchored on social media (Abedniya & Mahmoudi, 2010). The interactive features of social media are one of the major reasons for the predominance of social media as a platform for marketing communications and marketing activities (Burton & Soboleva, 2011). The increasing acceptance of social networking sites including *Facebook* improves the effectiveness of social media interactive marketing (Keller, 2009). Social media interactive marketing involves engaging prospective and current customers in order to engender a direct and effective connection with brands (Taecharungroj, 2016). The essence of interactive marketing is to create brand awareness, build positive brand image, and enhance active engagement and connection with brands. Interactive marketing is also used to evoke positive purchase decisions (Rohm et al., 2013).

Marketing communications on social media can be categorized into three types; information-sharing, emotion-evoking and action-inducing contents (Kapoor & Kulshrestha, 2013). Invariably, social media interactive marketing messages are action-inducing contents that are disseminated on social media to persuade and evoke positive purchase decisions.

Interactive marketing gives consumers the opportunity to connect with brands online (Jang & Chen, 2013; Chen, Fay, & Wang, 2011). In other words, interactive marketing is one of the tools of social media as a marketing platform, which enables brands and consumers to connect, communicate, and interact. Findings from previous studies have highlighted the importance of consumer engagement with brands and how consumers gratify the access of interacting with brands on social media, even more than physical interactions (Kapoor & Kulshrestha, 2013).

Many of the studies on social media marketing activities revealed that there are five primary motivations to consumers' engagement with brands on social media (Davis et al., 2014). These motivations are entertainment, interaction, trendiness, customization and word-of-mouth. The findings from these previous studies revealed that interaction is one of the important themes of social media marketing. Thus, social media is an effective platform for disseminating interactive marketing communications (Davis et al., 2014). According to Kim and Ko (2012), interactive marketing activities on social media refer to opinion exchange, information sharing and easy delivery of opinion from brand managers and brand marketers to their consumers.

2.4.4 Social Media Word-of-Mouth

Social media Word-of-Mouth (WOM) has been one of the most predominant types of marketing communications, especially since the advent of social media. This is because social media offers consumers a limitless opportunity to facilitate WOM communications (Wolny & Mueller, 2013). Social media WOM explains the type of communication or marketing strategy which is used to encourage consumers to help

create viral messages or publicize brands on the internet (Wolny & Mueller, 2013). Stauss (2000) added that WOM can be in form of negative and positive messages that are shared among consumers on social media to a throng of other customers, including potential, real and former customers. *Facebook*, *Twitter* and *YouTube* are practical platforms for sharing consumers' evaluations, reviews and usage experiences of products to a multitude of customers, hence social media WOM is considered a form of electronic WOM (Trusov, Bucklin, & Pauwels, 2009; Eisingerich, Chun, Liu, Jia, & Bell, 2014; Smith et al., 2012).

According to Doorn van et al. (2010), the predominance of social media WOM has increased consumers' role in the creation of brand identity and brand equity development. In addition, WOM on social media is not only influential to brand equity development. Studies have shown that it also has more impact on consumer behavior, attitude and response than other marketing communications (Goldsmith & Horowitz, 2006; Trusov, Bucklin, & Pauwels, 2009; Eisingerich, Chun, Liu, Jia, & Bell, 2014; Wolny & Mueller, 2013).

In view of the importance of social media WOM, studies have delved into its different directions. Some studies focused on the motivations of WOM on social media (Wolny & Mueller, 2013), types of involvements with WOM on social media (Muntinga, Moorman, & Smit, 2011; Christodoulides et al., 2012; Schivinski et al., 2016) and the importance of social media WOM in building brand equity (Keller, 2009). This study adopts the latter approach, banking on the notion that consumers create their perceptions of brands through the eyes of other consumers (Shi, Rui, & Whinston, 2014).

2.5 Review of Previous Studies

The following sections present the review of extant empirical literatures on the relationships understudied in this research.

2.5.1 Social Media Marketing Communications and Consumer-Based Brand Equity

In general, social media has proven to be an effective media with limitless opportunities for brand communication with regards to developing and enhancing CBBE (Dholakia et al., 2004). In addition, the ability to disseminate timely information and influence consumer perception are major reasons social media is gaining more attention from marketers and brand managers (Dholakia et al., 2004).

Even though the use of social media specifically for marketing communication purposes is still evolving, there has been a plethora of findings on the impact of social media on brand equity. Also, different studies have adopted different approaches in assessing the relationship between social media communications and brand equity. For instance, Bruhn et al., (2012) examined the impact of both traditional media and social media communication on CBBE in three different industries; tourism, telecommunications and pharmaceuticals. Their study employed both FCC and UGC to measure the impact of social media communications on consumer-based brand equity. Advertising was used to represent traditional media marketing communications. They examined the impact of brand awareness, functional brand image and hedonic brand image on brand attitude as measurements for brand equity on brand purchase intention. The result from the online survey conducted among 393 consumers revealed that advertising - user-generated and

firm-created - are significantly impactful on consumer-based brand equity. Their findings also revealed that social media communications have a positive influence on the two types of brand image (functional and hedonic).

Similar to the findings of Bruhn et al., (2012), Schivinski (2011) also hypothesized that FCC and UGC types of social media communications positively influence brand equity (brand awareness, functional brand image and hedonic brand image), and brand equity in turn influences brand purchase intention. Schivinski (2011) employed a standardized online survey on *Facebook* to collect data. Structural equation modeling in AMOS 21.0 was used for the model fit. The study affirmed that both firm-created and user-generated types of social media communications positively influenced brand equity. Brand equity was also found to be significantly influential on brand purchase intention. Overall, the research recommends that organizations should focus on social media as an important tool for building brand equity and influencing purchase intention.

In another study, Zailskaitė-Jakšė and Kuvykaite (2013) contributed to the theorization of the impact of social media communications on brand equity employing a mixed-method approach. The study affirmed that brand-related communications on social media can be categorized into three genres; brand-consumer communication, consumer-to-consumer communication and consumer-brand communication. The framework developed in the study illustrated that social media communications have positive impacts on the dimensions of brand equity; brand awareness, positive associations, and positive messaging about brand and brand loyalty. Notably, the methodological approach of categorizing the types of social media communications by both Bruhn et al.,

(2012) and Zailskaite-jakste and Kuvykaite, (2013) might differ. Their scholastic opinion on the significant impact of social media communications on brand equity is important, particularly on brand awareness and brand image.

Kim, Spiller and Hettche (2015) demonstrated the effect of social media communications on brand awareness by analyzing the types of content posted on *Facebook* and examining how these content are able to generate consumers' responses and participation. The result of the analysis of 1,086 contents on *Facebook* revealed that *Facebook* messages actively engage consumers' responses and interactions. The implication of consumers' responses and interactions on brand fan pages on their level of brand awareness is important. Meanwhile, the study conducted by Schivinski, (2011) segregated between the two types of social media communications ; FCC and UGC, and examined their effects on brand equity and brand purchase intention. The study was conducted among *Facebook* users and SEM was used in modeling the proposed theoretical framework. Ultimately, the results presented by Schivinski, (2011) corroborated the findings reported by Kim et al., (2015).

Zailskaite-jakste and Kuvykaite (2012) conducted a case study cum a systemic and comparative analysis of previous literatures to develop a conceptual model on how social media engagements of consumers impact on brand equity development. The model and the findings presented in their study provided an insight into how companies can exploit brand fan pages to develop viral brand awareness, build strong brand image and associations as well as influence consumers' decision making. In other words, the

study empirically justified the impact of FCC as a type of social media communications on building strong brand equity among consumers online.

Meanwhile, the findings presented in a study conducted among *Facebook* and *Twitter* users by Khadim, Younis, Mahmood and Khalid (2015) reported a significant impact of UGC on brand equity. The study also employed SEM to develop a structural model that explains the empirical connection between UGC as one of the important types of social media communications and consumer brand perception, otherwise referred to as consumer-based brand equity. The findings reported by Bonhommer & Jevons, (2010) also asserted that consumers' involvements through comments, feedbacks and comments on social media pages of brands are examples of UGC. These types of involvements were found to have a positive impact on brand equity. Similarly, Schivinski and Dabrowski (2015) hypothesized that UGC has a positive impact on brand equity. The study reported that the hypothesis was accepted from the structural model properties reported from SEM analysis. Meanwhile, Severi, Ling, and Nasermodeli, (2014) adopted brand awareness, brand image, brand association, perceived quality and brand loyalty as the constructs of brand equity. The study also found an indirect impact of brand equity of constructs on the impact of electronic word-of-mouth (which is another form of UGC) on consumers' decision.

Langaro et al., (2015) also contributed to the pool of studies in this regard. Their study established an empirical justification for the role of consumers' participation on *Facebook* brand pages, which understandably encompasses both UGC and FCC in building brand knowledge. To be explicit, the study found positive significant effects of

consumers' *Facebook* participations on brand pages in building brand awareness and positive brand association. Meanwhile, the rationalization of brand association presented in the study conducted by (Li & Mousseaux, 2013) is also an illustration of brand image, according to Keller, (2009).

In essence, social media communication typifies online branding activities that do not only serve brand owners and brand managers to establish strong brand awareness and build positive, hedonic and functional brand images. It also gives room for consumers to exchange their brand-related experiences and integrate their anecdotal brand-related stories with the real story of the brand (Haida & Rahim, 2015). Corroboratively, a study conducted in Malaysia by (Haida & Rahim, 2015) revealed that there is a positive and significant relationship between informative social media advertising and product awareness. Impliedly, the study contributed to the empirical findings on the effective role of social media communications in establishing brand awareness and building both positive hedonic and functional brand images among consumers. Noticeably, the findings presented by Goh et al., (2013) did not examine the relationships between brand equity and the two types of social media communications; UGC and Marketing-Generated Content (MGC). The operationalization of MGC in their study, as the type of social media contents that are posted or disseminated by brand owners, is very similar to FGC. Consistent with the report presented by Haida and Rahim (2015), it is in a way corroborative to that of Goh et al., (2013), as they asserted the informative richness of both UGC and FGC and their significant impacts on consumers' purchase behavior.

Notably, the findings reported by Schivinski and Dabrowski, (2014) are useful for examining the impacts of FCC and UGC on consumer-based brand equity. The study reported that both FCC and UGC have significant impacts on brand awareness and brand association. Meanwhile, only the significant impact of UGC is found on brand loyalty and perceived quality. The study also reported the differences in the impact of brand-related communication from three different industries; beverages, clothing and telecommunications. In other studies presented by Khadim, Zafar, Younis, and Nadeem (2014), *Facebook*, *Twitter*, *LinkedIn* and *YouTube* users were surveyed in Pakistan on the impact of both FCC and UGC on consumers' perceptions of technology-related brands. Using a similar approach, Schivinski and Dabrowski, (2014) surveyed 504 *Facebook* users across Poland and examined the impacts of FCC and UGC on brand equity and brand attitude. The study revealed that only UGC has a significantly positive impact on brand equity and brand attitude. FCC was reported to have no significant impact on brand equity. Obviously, the result of Schivinski and Dabrowski, (2014) is inconsistent with the account presented by Khadim et. al., (2014). This kind of empirical inconsistency encourages further research into the impacts of social media communications on consumer-based brand equity which will be addressed in this study.

Hajli, (2013), in a study that involved 237 users of *Facebook*, *Twitter* and *LinkedIn*, employed the theoretical perspectives of the Technology Acceptance Model (TAM) to establish a positively significant relationship between the use of social media and consumers' trust, which consequently leads to purchase intention. The author found that apart from the interconnectivity between consumers, trust - which is an integral construct in explaining relationship equity - Kim and Ko (2010) is another important

benefit of using social media as a marketing strategy. However, the study conducted by Gummerus, Liljander, Weman, and Pihlstrom, (2015) employed a slightly different approach to examine the impact of different types of consumer engagement on social media on consumer satisfaction, with the mediating effects of relationship benefits. Overall, the study implied that engaging consumers on social media platforms has significant implications on the type of relationship consumers hold with brands.

Similarly, using a structural equation modeling analytical approach, Ho (2014) was able to establish the empirical connection between social media participation and consumers' trust. The study explained that the more consumers participate on brand fan pages, the more they develop trust in the brand, and this trust subsequently leads to exhibiting consumer citizenship behaviors. The study of Ho (2014) and Hajli (2013) adopted brand trust as the manifestation and determinant of consumers' relationships with brands.

A study conducted by Jusoh et al., (2012) also examined the impact of social media marketing activities on the levers of customer equity - value equity, brand equity and relationship equity - and brand purchase intention of luxury brands on social media in Korea. Using a multivariate analytical technique in both the SPSS 17.0 and AMOS to analyze their collected data, the study found a significantly positive relationship between social media marketing activities and relationship equity.

According to Jusoh et al., (2012), the content analyses of the *Facebook* accounts of 15 Malaysia-based corporations revealed that these corporations are not using *Facebook* and other social media networks in an exhaustive manner. So far, according to the report, social media platforms are used only to disseminate information and get involved

with consumers. Even at that, the findings of the study strongly implied that social media communications help organizations build positive relationships with their consumers in Malaysia. Although the study conducted by Abd Jalil, (2010) was limited to descriptive statistics for the analysis, it was able to assert that social media networks such as *Facebook*, *Twitter*, *LinkedIn* and other social networking sites are widely used among Malaysians and across races and age groups of the Malaysian populace. In conclusion, the study revealed that these aforementioned social networking sites can avail organizations the platform for building strong and positive relationships between Malaysians and their products. Hadadi and Almsafir (2014) also concurred that social media advertisements are influential on foreign consumers who purchase Proton products.

Hamid et al., (2013) collected both primary and secondary data among hoteliers in Malaysia and analyzed with both correlation and regression analysis in SPSS. The findings of the study affirmed that social media communication is an emerging marketing dimension in Malaysia. Also, a strong and significant relationship was established between social media communication and equity relationship. The study employed both trust and consumer retention to measure relationship equity.

Hennig-Thurau et al., (2010) added to the array of discussions on social media and its peculiar impact on relationship equity. The study identified 10 scenarios from the evolving social media platforms. In the end, the study developed a “pinball” model which outlined among other things, the management of customer interactions and the measurement of customer data and relationship outcomes. Hoeffler and Keller (2003)

concluded that social media is powerful in shaping relationships between brands and consumers.

2.5.2 Social Media Marketing Communications and Consumer Responses

Scores of studies have highlighted that effective brand communications are strategically disseminated to build positive perception of brand equity in the minds of consumers. Therefore, the possibility of a brand being incorporated in consumers' mindsets are increased with marketing communications (Hoeffler & Keller, 2003), hence influencing the process of brand decision making and consumer responses in terms of purchase intention and brand preferences (Schivinski, 2011; Yoo, Naveen, & Sungho, 2000; Keller, 2009). This can be said of all social media marketing activities and communication efforts because of the opportunities usage of social media for disseminating brand-related contents offer both brand managers and consumers to post, share, comment and interact with brand information (Woodcock, Green, & Starkey, 2011). This opportunities help to increase consumers' engagement and relationships with brands online and subsequently affect consumer behaviors and responses (Woodcock, Green, & Starkey, 2011).

Studies continue to emerge on the impact of social media marketing communications on consumer responses (Abzari et al., 2014; Bruhn et al., 2012; Bushelow, 2012; Jalilvand & Samiei, 2012; Karman, 2015; Khadim et al., 2014; Kim & Ko, 2012; Schivinski, 2011; Schivinski & Dabrowski, 2014). However, many of these studies have delved into the impact of social media marketing communications on consumer responses on a fragmentary basis, which subsequently led to inconsistent finding. In essence, there has

been a paucity of studies linking the effects of social media marketing communications to consumer responses beyond purchase intention. However, Mirabi et al., (2015) and Cobb-Walgren et al., (1995) have revealed that marketing communication activities such as brand advertisements evoke positive and favorable consumer responses in terms of purchase intention and brand preference.

Khadim et al., (2014) reported that the impact of FCC and UGC on brand equity extends to consumer purchase intention. Hence, a positive impact of brand equity or brand perception is created through the communication appeals of both FCC and UGC on consumers' purchase intention. In light of the upsurge of popularity of social media communications for reaching out to consumers, Schivinski et al., (2015) reported that there is a significant impact of UGC on brand equity and purchase intention. The implication of this is that what consumers say to themselves about a brand on social media affect consumers' intentions to purchase the brand. Their findings are similar to the results reported by Godey et al. (2016), which revealed that social media marketing efforts yield positive responses from consumers of luxury brands, responses which include brand preference.

Bruhn et al., (2012) reported a positive impact of brand awareness, hedonic brand image and functional brand image on brand purchase intention through brand attitude. Similarly, a study conducted by Khadim et al., (2014) reported that the effects of social media communications on brand equity yield a positive impact on brand purchase intention. The implication of these findings is that brand purchase intention represents the behavioral outcome of consumers' perception, created through or by both FCC and

UGC. In line with the dual attitude theoretical perspectives, which proffered that mere exposure to online advertisement can either be explicit or implicit, Goodrich (2011) conducted an experimental study to manipulate the effect of online advertising on consumers' attitude and purchase intention. Another experimental study conducted by Batra and Homer (2004) concurred that consumer perception of brand image is positively related with brand purchase intention and not brand attitude.

The study conducted by Mathews et al., (2009) was an exhaustive attempt to study the two types of brand image; hedonic and functional brand image. The study explained that all brands have both hedonic and functional brand images. The study reported that consumer perception of both hedonic and functional brand image of brand attribute is positively connected to their purchase intention. Similarly, Schivinski and Dabrowski, (2014) found a significantly positive impact of brand equity on brand purchase intention. The study posited that FCC and UGC are types of social media communications that lead to positive brand equity and brand attitude. Similarly, Monavvarian et al., (2015) found that Starbucks' social media activities such as; posting, liking and sharing posts on *Facebook* in Indonesia lead to brand equity development and positive purchase intention.

2.5.3 Consumer-Based Brand Equity and Consumer Response

Many previous studies have demonstrated that it is important to focus on brand equity development and management (Monavvarian et al., 2015). Among other significant reasons, influencing consumer responses positively and significantly are part of the major concerns for developing successful brand equity (Cobb-Walgren et al., 1995).

This is because, successful, positive and strong characteristics of a brand influence consumers' purchase intentions and preferences (Hoeffler & Keller, 2003). In other words, the value of a brand can be depicted in consumers' behavior in terms of consumers' loyalty to purchase the brand and consumer purchase preferences (Hoeffler & Keller, 2003).

The body of literature is replete with studies that demonstrate positive relationships between different determinants of brand equity on different measures of consumer responses. Majority of previous studies focusing on determining the consequences of CBBE with regards to consumer responses focus on purchase intention (Abzari et al., 2014; Bruhn et al., 2012; Bushelow, 2012; Jalilvand & Samiei, 2012; Karman, 2015; Khadim et al., 2014; Kim & Ko, 2012; Schivinski, 2011; Schivinski & Dabrowski, 2014). However, Hoeffler and Keller (2003) asserted that purchase intention and brand preference are the most important factors for determining the success and value of brand equity on consumer responses. A couple of studies have empirically asserted the significance of purchase intention and brand presence as dimensions of consumer responses to successful brand equity development (Chang & Liu, 2009; Chen & Chang, 2008; Moradi & Zarei, 2011; Tolba & Hassan, 2009; Vinh & Huy, 2016).

The findings of these studies are in line with the arguments proffered by Keller (1993), who opined that consumers react to successful brand values by purchasing the brands and making them their preferences. Similarly, Cobb-Walgren et al. (1995) revealed across two categories of product involvements - high involvement (hotels) and low

involvement (household cleaners) - that successful brand equity leads to brand preference and purchase intention.

Buil, Martínez, and Chernatony (2013) explored the relationships between brand equity dimensions, overall brand equity and consumer responses from two European countries; United Kingdom and Spain. Buil, Martínez, and Chernatony (2013) measured consumer responses with premium price, brand extension, brand preference and purchase intention. Their findings demonstrated a significant effect of brand equity on consumer responses, especially purchase intention and brand preference. On a similar note, Monavvarian et al. (2015) evaluated the effects of brand equity on consumer response dimensions. It was revealed that a higher value of brand equity leads to positive responses from consumers, which include purchase intention and brand preference. Vinh and Huy (2016) emphatically noted that purchase intention and brand preference are the two most important consumer responses, most especially when engaging with high involvement brands such as automotive brands.

2.6 Consumer Stimulus-Response Model

Consumer Stimulus-Response model is one of the derivatives of consumer behavior theories which explain how consumers make decisions based on the resources available to them (Clarke, 2002). The consumer behavior theories are complex and have various focus areas. However, the underlying premise of the consumer behavior theories explains consumers' purchase behaviors with regards to their needs, desires, experiences and satisfactions (Clarke, 2002).

According to Nicosia and Mayer (1976), consumer behavior involves several activities, which include information searching, purchasing, using and selecting products to meet consumers tastes and/or satisfaction. The consumer stimulus-response model is one of the models that theorize consumer behavior. The model explains consumers' response to the brand-related contents as sets of stimuli that are related to brand building activities. The stimulus model focuses on the relationship between marketing communications, consumers' perceptions and responses. Hence, the model explains how organizations are connected to their consumers through communication activities and how brand managers influence consumers' perceptions and responses (Kotler & Keller, 2012). According to theorists, marketing decisions are central to the development of brand equity and consumer responses (Nicosia & Mayer, 1976).

The consumer stimulus-response model entails four different fields, which include the consumer attitude field, the search and evaluation field, the action or the purchase field and the feedback field (Kotler & Keller, 2012). The first field - which is the consumer attitude based on the firms' messages - is also known as the problem recognition field. This field can be divided to two subfields; marketing communication and consumer character fields. The first field of the stimulus-response model basically explains how marketing communications, marketing environments, consumer characteristics, perceptions and attitudes towards the firms' messages, products and the firm affect consumers (Belch & Belch, 2003).

The second field is the search and evaluation field, where consumers evaluate brands in comparison to brand alternatives. In this field, consumer psychology in terms of

motivation, perception, learning and memory plays a vital role in helping consumers make brand-related decisions. This stage is where the CBBE model comes to play. Thus, consumers start to evaluate diverse alternatives when they access their memories for brand perception of the brand. As such, brands with successful brand equity according to consumers' perceptions will be considered against alternative brands. Consumers' perceptions or mindsets towards brands are created through their interpretations of marketing stimuli, which include marketing communications (Kotler & Keller, 2012).

The last two fields are the act of purchase and feedback fields. These two fields are combined in this study as they are both regarded as the consumer responses phase. The act of the purchase field explains the consumer's determination, conviction, intention and decision to purchase the evaluated brand. This in other words can be regarded as purchase intention. Meanwhile, the feedback field explains how the consumer's experience affects his attitude towards future purchase (Kotler & Keller, 2012).

Kotler (1997) explained that, the CSRM is useful to explain the behaviors and responses of consumers as the result of both marketing and environmental stimulus. The CSRM opined that, consumers are naturally exposed to both marketing stimuli which include; marketing mix (product, price, place, and distribution), people, communication, process and physical evidence and market environment stimuli which entails; economic, technological, political and cultural situations of the market. The mental process of the buyers which is referred as the black box relied on these types of stimulus to make

decisions in relation to their product choice, brand choice, dealer choice, purchase quantity and purchase timing. In summary, the CSRM proffers that, consumers' behaviors and responses are the products of the interactions between three elements; problem recognition, information search and evaluation of alternatives. Figure 2.4 depicts the interactions between the elements of CSRM as adapted from both Kotler et al. (2009) and Vakratsas and Ambler (1999).



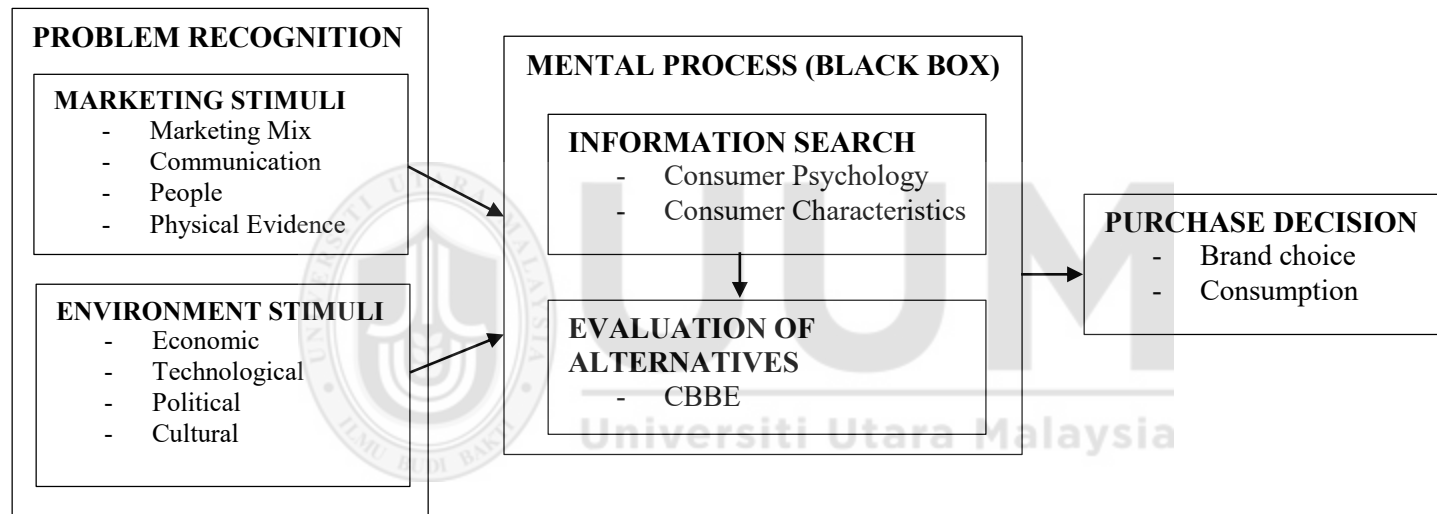


Figure 2.2. The Consumer-Stimulus Response Model (Kotler et al., 2009; Vakratsas & Ambler, 1999)

In specific terms, the CSRM presented in Figure 2.2 explains how social media marketing communications - an exemplification of marketing stimuli - evoke certain attitudes and responses from consumers. This study focuses on communication among other marketing stimuli, which can include market environments and communications. Majority of consumers that are users of social media today are exposed to numerous types of marketing communications (Keller, 2009). As such, consumers are expected to filter the information received from those marketing messages in their brains, retain the information that are relevant to them and secure the information in their memory for future usage. This information is otherwise referred to as brand knowledge. According to Aaker (1997) and Keller (1999), consumers filter the information received from marketing communications based on their psychological factors. Consumers' psychological factors - include their perceptions and mindsets - are present in consumers' subconscious minds and have a strong influence on their actions and reactions to products (Clarke, 2002). This is the premise that guides the development of brand equity models (Keller, 1999).

Additionally, Blech and Blech (2003) explained that, consumers' perception are product of various marketing stimuli which are otherwise known as contact points. This perception invariably explain the impact of marketing stimuli for example, marketing communications on consumers' brand choice and consumer response (Kotler et al., 2009). Both marketing stimuli and environmental stimuli are believed to have akin impacts on consumers' mental processes. However, consumers do not consider all the stimuli at the same time. This is because, consumers' mental process does not possesses

the capability to process the clutter of information received on a daily basis. This is especially true of consumers of nowadays where marketing communications reach consumers both from traditional media and social media. Hence, brand-related information are processed either consciously or sub-consciously. Therefore, consumers employ information processing filters and psychological factors to form a perception which further guides their reactions and response towards the marketing communications and brand information (Kotler et al., 2009; Vakratsas & Ambler, 1999).

CBBE models in other words represent consumers' perceptions and mindsets (Aaker 1991). As such, according to CSRM, both CBBE and consumer responses are products of psychological evaluations or reactions that are stimulated by marketing stimuli, in this case, social media marketing communications. Consumers' perceptions and mindsets are central to any purchase made by them. In reality, social media marketing communications is used by brand managers to influence consumers' perceptions (CBBE), influence consumers to think about a brand and stimulate positive reactions (Clarke, 2002). When consumers are convinced or successfully persuaded, their perceptions will yield favorable responses in terms of purchase intention and brand preference. According to Kotler and Keller (2012), perception is a process which is used by individuals to select, organize and interpret information. Hence, perception is what determines marketing reality.

The underlying theoretical arguments of the CSRM is considered relevant for the development of theoretical framework in this study only because not only because it

theorizes how consumers feel, think and act but also because it reflect the mediating role of consumers' emotions, perception and psychology on the effects of both environmental and communication stimulus on consumers behaviors. For instance, in a study conducted by Graa and Dani-elKebir (2012), the fundamentals of CSRM is applied to explain the mediating role of consumers emotions and feelings on the impact of environmental stimulus on impulse buying behaviors of Algerian consumers. In congruence, this present study applies the fundamental prepositions of CSRM to determine the direct and indirect effects of social media marketing communications, CBBE and consumer response.

2.7 The Theoretical Framework

The theoretical framework proposed in this study is presented in Figure 2.3. Relying on previous CBBE and marketing communications studies such as; (Schivinski & Dabrowski, 2014; Schivinski, 2011; Bruhn et al., 2012; Zailskaite-jakste & Kuvykaite, 2013;Khadim et al., 2015; Khadim, Zafar, Younis, & Nadeem, 2014), this study proposed that social media marketing communications in terms of FCC (social media advertising, social media sales promotions and social media interactive marketing) and UGC (social media WOM) have a significantly positive relationship with CBBE of automotive brands and consumer response. Also, the indirect effect of CBBE on the relationship between social media marketing communications and consumer response are proposed. This study focuses on CBBE of automotive brands with the aim of developing an empirical model for CBBE of automotive brands. Hence, it is proposed that automotive CBBE can be measured with brand awareness, functional brand image, hedonic brand image and brand sustainability.

In addition, this framework also depicts the connection between CBBE and consumer responses. Consumer responses are referred to as purchase intention and brand preference (Kim & Ko, 2012; Bruhn et al., 2012). The framework is proposed to explain the differential effects of social media marketing communications on automotive CBBE and consumer response. It also establishes the effect of consumers' mindsets, otherwise known as CBBE (Keller, 2009; Bruhn et al., 2012; Brunello, 2015) on consumer response. In essence, the underlying objective of this study is to establish the connection between consumers and brands through social media marketing communications and CBBE, as well as the consequences of such relationships in terms of purchase intention and brand preference (Brunello, 2015).

Furthermore, the development of the theoretical framework and the formulation of hypotheses are theoretically guided by the CSRM (Kotler & Keller, 2012). The model explains how marketing stimuli evoke certain attitudes and responses from consumers. In other words, marketing communications such as social media advertising, social media promotions, social media interactive marketing and social media word-of-mouth exemplify marketing stimuli. According to the CSRM model, there are several types of marketing stimuli, which include marketing communications and market environment stimuli that influence consumers' mental process of forming and creating perception. Consumers' perception is the product of their psychology and can be represented by CBBE. The perception of consumer is expected to influence their behavior and response to brand-related information (Kotler et al., 2009; Vakratsas & Ambler, 1999; de Chernatony & McDonald, 2003; Keller, 2009). As such, those marketing messages devolved on social media platforms are expected to be processed in consumers' black

box filtered by their characteristics and psychology to produce a perception. Consumers' perception is referred to as CBBE. According to Aaker (1997) and Keller (1999), consumers filter the information they receive from marketing communications based on their psychological factors. Consumers' psychological factors include their perceptions and mindsets, which are present in consumers' subconscious minds and have strong influence on their actions and reactions to products (Kotler & Keller, 2012). This is the premise that guided the developments of CBBE models (Keller, 1999).

CBBE models in other words represent consumers' perceptions and mindsets (Aaker 1991). As such, according to the CSRM, CBBE is the product of psychological evaluations or reactions that are stimulated by marketing stimuli; in this case, social media marketing communications. Thus, when consumers are convinced or successfully persuaded by marketing communications, their perceptions of brands will be positive and favorable. According to Kotler and Keller (2012), perception is a process which is used by individuals to select, organize and interpret information. Hence, perception is what determines marketing reality. Therefore, the theoretical model proposed in this study is expected to provide empirical evidence to the CSRM by revealing the direct and indirect relationships between social media marketing communications, CBBE and consumer response.

Firm-Created Contents

Social Media
Advertising

Social Media
Sales
Promotion

Social Media
Interactive
Marketing

User-Generated Contents

Social Media
Word-of-
Mouth

**Automotive Consumer-
Based Brand Equity**

- Brand Awareness
- Functional Brand Image
- Hedonic Brand Image
- Brand Sustainability

Consumer Response

- Purchase Intention
- Brand Preference

Figure 2.3. Proposed Theoretical Framework

2.8 Summary of the Chapter

This chapter presents a review of previous literatures with regards to CBBE, social media marketing communications, consumer response and the relationships between the variables. The review of extant literature is also explored in this chapter, by providing the empirical justifications for the development of the conceptual framework. This chapter presents the development of the hypotheses tested in this study and the hypothesized theoretical model. This following chapter discusses the methodological approach and the research design employed in this study.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter features detailed explanations of the entire methodological process employed in this study and the entire roadmap for achieving this study's aims and objectives. The methodological scope of the study involves a mix-method approach entailing both qualitative and quantitative research approaches. The research design and all the sub-topics of the methodology - including the pilot study and the procedures for data analysis - are expatiated below. The chapter also presents the methodological framework of the study, which depicts the flow of the research towards achieving its highlighted objectives. The sampling method and survey technique are described in this chapter with ample justifications. Section 3.1 discusses the hypotheses development and Section 3.2 presents the research approach followed Section 3.3, which discusses the research design. Section 3.3 discusses the multi-stages of items development, while the population of the study is discussed in Section 3.4. Section 3.5 discusses the data collection procedure, and the method of analysis is presented in Section 3.6. Finally, the summary of the chapter is discussed in Section 3.7.

3.1 Hypotheses Development

The justifications for the development of hypotheses in this study are presented in the following sections.

3.1.1 Direct Relationship between Social Media Advertising and Consumer-Based Brand Equity

Social media advertising is a type of advertising messaging that is disseminated on social media platforms (Cobb-Walgren et al., 1995). Researchers have demonstrated that the essence of advertising is entrenched in its ability to develop brand equity in so many ways, which include perceived quality, perceived satisfaction, brand awareness, brand image and overall brand equity. Advertising contents can help consumers recognize and recall a brand, especially during purchase or when thinking about brand categories. Similarly, the appeals in advertising can increase positive brand associations, which can yield to favorable behavioral reactions (Cobb-Walgren et al., 1995). Empirical findings have also shown that higher spending on advertising (Bravo Gil, Fraj Andrés, & Martinez Salinas, 2007; Yoo et al., 2000), consumers' attitudes and experiences lead to an increase in brand equity. Since the upsurge in social media popularity, scores of studies have delved into how social media and marketing activities contribute to the development of brand equity. However, not so many studies have focused on examining the importance of social media marketing communications to CBBE. Therefore, the following hypothesis is formulated;

H₁: Social media advertising has a significant relationship with CBBE of automotive brands

3.1.2 Direct Relationship between Social Media Promotion and Consumer-Based Brand Equity

The literature has unanimously depicted sales promotions as the next most important marketing communication after advertising. Most consistently, promotional

messages are used to evoke sales (Villarejo-Ramos & Sánchez-Franco, 2005). However, much argument has been generated in determining the impact of promotions on brand equity, especially in the consumer's perspective (Villarejo-Ramos & Sánchez-Franco, 2005). Some studies have demonstrated a negative relationship between sales promotions and brand equity (Winer, 1986; Martínez et al., 2009; Yoo et al., 2000; Valette-Florence, Guizani, & Merunka, 2011). The logic behind such assertion was that the primary essence of developing brand equity is to strategically influence consumers to pay premium price. As such, if a product has favorable and successful brand equity, there should be no need to employ sales promotions such as price deals (Agarwal & Teas, 2002). This is because consumers use price as the basis for judging product quality and vice-versa (Agarwal & Teas, 2002).

However, a handful of other researchers such as; Villarejo-Ramos and Sánchez-Franco (2005), Martínez et al. (2009), Joseph and Sivakumaran (2009), Shen and Bissell (2013) and Taecharungroj (2016) have also revealed that a positive relationship exists between brand equity and sales promotions. These studies implied that sales promotions can also be used to create positive brand associations between consumers and brands. Thus, the real effect of promotions on CBBE is unknown (de Chernatony, et al., 2013; Chu & Keh, 2006; Demangeot & Broderick, 2010). In addition to that, studies have shown that promotions are part of the marketing activities that are anchored on social media (Taecharungroj, 2016). In spite of this development, many studies have not really delved into determining the effect of

sales promotions - especially those that are anchored on social media platforms - on CBBE. Consequent upon the above, this study formulates the following hypothesis:

H₂: Social media promotion has a significant relationship with CBBE of automotive brands

3.1.3 Direct Relationship between Social Media Interactive Marketing and Consumer –Based Brand Equity

Interactive marketing is a type of marketing communications that is particularly relevant to social media and other digital platforms (Kotler, Keller, Brady, Goodman, & Hansen, 2009). This is especially true because the interactivity of social media was one of the primary reasons for using it as a marketing communications channel. According to Keller (2009), interactivity is one of the noticeable differences between digital and traditional marketing communications. Simmons, Thomas and Truong (2010) defined interactivity as the ability to communicate and interact with little or no hindrances of long distances and time differences. Applying this definition of interactivity to marketing, interactive marketing allows marketers to create direct and interactive connection between their customers and brands. Social media is an extraordinarily suitable and relevant platform for this type of marketing. The practical examples of the interactive feature of social media include; linking social media pages with official websites, giving a pictorial experience of brands and ensuring a direct link with brands. Kotler et al. (2009) opined that interactivity, customization, personalization, timely information, traceability and accountability are the major attributes of interactive marketing. In addition, these attributes are akin to the attributes of social media marketing

activities (Keller, 2010; Shankar & Balasubramanian, 2009). Few previous studies have managed to establish a relationship between interactive marketing and CBBE dimensions (Mirabi et al., 2015). In view of this, this study formulates the following hypothesis:

H3: Social media interactive marketing has a significant relationship on CBBE of automotive brands

3.1.4 Relationship between Social Media Word-of-Mouth and Consumer-Based Brand Equity

Arguably, determining the role of consumers was a common and underlying motivation for most previous studies that have focused on social media and brand equity development (Langaro et al., 2015). Most of these studies have employed different approaches to analyze the role of users of social media in building strong brand equity. The approaches that have been adopted include; examining customer/user engagements, interactions, involvements, consumption and WOM reviews of brands on social media (Abzari et al., 2014; Bonhommer et al., 2010; Bruhn et al., 2012; Christodoulides et al., 2012; Jalilvand & Samiei, 2012; Karman, 2015; Karpńska-Krakowiak, 2016; Schivinski, 2011; 2015 Schivinski & Dabrowski, 2014, 2015; Severi et al., 2014; Zailskaitė-Jakstė & Kuvykaite, 2012). However, there might have been differences in their approaches but the outcomes of these studies are unanimous in justifying the essence of consumers' evolving freedom of contribution to brand-related communications on social media. Social media WOM is one of the most significant forms of consumers' contribution to brand-related

communications on social media (Bruhn et al., 2012; Schivinski & Dabrowski, 2015). Therefore, this study represents UGC with Social Media Word-of-Mouth.

Determining the effect of WOM on CBBE has continued to receive significant attention from researchers. In spite of that, little is known about how exactly WOM that are disseminated on social media are affecting consumers' perceptions of brands. In the context of social media, majority of extant studies focused on the effects of consumers' involvements, engagements and creation of WOM on different dimensions of CBBE (Jalilvand & Samiei, 2012). However, far little considered the outcome of WOM reviews on CBBE, especially in the context of high involvement products like automotive brands (Kenyon & Sen, 2012; Lew & Sulaiman, 2014). In light of the above arguments, the following hypothesis is presented:

H4: Social media word-of-mouth has a significant relationship with CBBE of automotive brands

3.1.5 Direct Relationship between Firm-Created Contents and Consumer Responses

Marketing communications including advertising, promotions and interactive marketing are all part of strategies that are used to influence the consumer's decision-making process. These marketing communications genres are used to establish connections between brands and consumers. In other words, advertising, promotions and interactive marketing can be used to enhance brand acceptance, which subsequently leads to different types of consumer responses, such as purchase intention and brand preference (Buil, de Chernatony, et al., 2013). Hence, positive

responses are consequences of consumers' positive evaluations of marketing communications and CBBE (Lew & Sulaiman, 2014). Researchers have shown that there are several strategies that can be used to influence consumers' favorable responses (Lew & Sulaiman, 2014). For instance, advertisements are used to increase awareness and establish emotional connections between consumers and brands. Promotions in terms of product display, price rebate and discounts are particularly used to evoke purchase. Also, interactive marketing techniques are used to evoke purchase through direct interactions with consumers (Kim & Ko, 2012).

The findings of previous researchers have indicated that social media communications and marketing activities are significant efforts in building strong and successful brand equity, which can influence favorable attitudes, behaviors and responses from consumers (Abzari et al., 2014; Bruhn et al., 2012; Bushelow, 2012; Godey et al., 2016; Jalilvand & Samiei, 2012; Karman, 2015; Khadim et al., 2014; Kim & Ko, 2012; Schivinski, 2011; Schivinski & Dabrowski, 2014, 2014). However, most of these studies have only examined the significance of social media marketing efforts on consumer responses on a piecemeal basis. In view of this, the following hypotheses are presented:

H₅: Social media advertising has a significant relationship with consumer response to automotive brands

H₆: Social media promotion has a significant relationship with consumer response to automotive brands

H7: Social media interactive marketing has a significant relationship with consumer response to automotive brands

3.1.6 Direct Relationship between Social Media Word-of-Mouth and Consumer Response

Previous studies have shown that consumer behavior and response are highly influenced by WOM (Jalilvand & Samiei, 2012). The implication of this is that consumers consciously search for other consumers' opinions and reviews of experienced consumers before making purchase decisions of products. Consumers also pay attention to all kinds of information, ranging from price, performance of the product, functional quality and attributes of the product they are deciding to buy. More attention is particularly placed on this kind of reviews when high involvement products such as cars are involved (Gensler et al., 2013). Social media has opened an effective window of opportunity for consumers to share their comments and reviews, as well as deliver positive homage or complaints to brands (Gensler et al., 2013). Reading such comments and reviews is expected to have a significant effect on consumer responses (Bruhn et al., 2012; Christodoulides et al., 2012; Jalilvand & Samiei, 2012; Kim & Ko, 2012; Zailskaite-jakste & Kuvykaite, 2012). Therefore, this study proposes the following hypotheses:

H8: Social media word-of-mouth has a significant relationship with consumer response to automotive brands

3.1.7 Direct Relationship between Consumer-Based Brand Equity and Consumer Response

Theoretically, it has been established that CBBE represents consumers' mindsets and perceptions (Buil, Martínez, et al., 2013b). Ultimately, consumers' perceptions and mindsets are not necessarily the facts or the truth about a brand, they are rather representations of consumers' thoughts, feelings, perceptions, comprehensions, associations, images and experiences in the minds of the consumers (Zailskaite-jakste & Kuvykaite, 2013). The nature of consumers' perceptions determines consumer responses (Buil, Martínez, et al., 2013b), especially in the automotive industry (Zhang, 2015). In addition, many previous studies have demonstrated that consumer perception is an antecedent of their responses (Kim & Ko, 2012). The most significant types of consumer responses with regards to CBBE are purchase intention and brand preference (Buil, Martínez, et al., 2013b; Chang & Liu, 2009; Chen & Chang, 2008; Cobb-Walgren et al., 1995; Monavvarian et al., 2015; Moradi & Zarei, 2011; Prasad et al., 2014; Tolba & Hassan, 2009).

Towards the aim of determining the effect of CBBE consumer responses, previous researchers such as; Schivinski, (2011), Schivinski and Dabrowski, (2014), Mathews et al., (2009), Batra and Homer (2004), Khadim, Zafar, Younis, and Nadeem (2014), Goodrich (2011) have focused on different dimensions of CBBE from different industries and contexts. However, a few studies have focused on how CBBE of automotive brands influence consumer response, especially in terms of purchase intention and brand preference. As a result, the following hypotheses are presented;

H9: CBBE of automotive brands has a significant relationship with consumer response to automotive brands

3.1.8 Indirect Effect of Consumer-Based Brand Equity

The indirect relationship of CBBE is premised on the fundamental proposition of CSRM model which proffered that, consumers consciously and subconsciously employed certain information filters in the process of processing brand-related information and when they are evaluating their options for alternatives (See Figure 2.5). In this case, their perception becomes a product of their mental process which can enhance the impact of brand-related information and appeals on their responses and behaviors. Meanwhile, advocates of CBBE unanimously believed that, CBBE is a practical model for measuring consumer perception and mindset (Kotler et al., 2009; Keller, 2009; de Chernatony & McDonald, 2003). Therefore, when consumers have favorable perception towards the attributes of a brand, it heighten the influence of their response to the information received through marketing communications such as; advertising, promotion, interactive marketing and WOM.

There have been a handful number of studies that have introduced CBBE and several other dimensions of CBBE as intervening variable between marketing communications and consumer response and behaviors dimensions. However, these studies do not determine the indirect effect of CBBE on the relationship between marketing communications and consumer response. For example, Yoo et al. (2000) reported that, significant relationships exist between price deal, advertising spending with dimensions of CBBE (perceived quality, brand loyalty and brand

association/awareness) and overall brand equity. Additionally, Buil et al., (2012) employed similar CBBE dimensions as intervening variables for the relationships between advertising, attitude towards advertisement, monetary and non-monetary promotion and brand equity. Nikabadi, Safui and Agheshlouei (2015) also placed a similar type of CBBE dimensions as the intervening variables between the relationships of advertising, promotions and brand loyalty. Their findings evinced that, CBBE dimensions influenced brand loyalty, however, there are inconsistent relationship between advertising, promotions, CBBE dimensions and brand loyalty.

This trend has been continued in the budding literature of social media communication and brand equity. A number of studies have examined the relationship between different types of social media communications and response/behavioral variables with CBBE as intervening variable. For instance, Bruhn et. al., (2012) developed a complex model which entails several CBBE dimensions such as; brand awareness, hedonic brand image, functional brand image and brand attitude as the intervening variables between social media communications (FCC and UGC) and purchase intention. In the same vein, Kim and Ko (2012) intervenes the relationship between social media marketing activities and purchase intention with brand equity. Their result revealed that, there is a strong and significant relationship between social media marketing activities, brand equity and purchase intention. Also, brand equity and purchase intention demonstrated a significant relationship.

Additionally, Jalilvand and Samiei (2012) adopted brand image as an intervening variable between electronic WOM and purchase intention. The study revealed that,

significant relationship exist between electronic WOM, brand image and purchase intention. The framework developed in Schivinski and Dabrowski (2014) also depicted brand equity between FCC, UGC and purchase intention. Even though their study could not established a significant effect of FCC on brand equity, it was reported that, FCC influenced both brand equity and purchase intention. Also, FCC have significant effect on purchase intention. Abzari et al., (2014) included brand attitude as an intervening between social media advertising and purchase intention. Their result demonstrated that, social media advertising has a significant effect on brand attitude and brand attitude significantly influence purchase intention.

In view of the common trend of introducing CBBE as an intervening variable between social media communication and consumer response, Schivinski (2011) is one of the far little studies which have examined the indirect effect of CBEE. The result of Schivinski (2011) demonstrated that, CBBE mediates the relationship between FCC, UGC and purchase intention. In line with the above argument, this study examines the mediating effect of CBBE on the relationship between social media marketing communications and consumer response. Therefore, the following hypotheses are formulated:

H₁₀: CBBE of automotive brands mediates the relationship between social media advertising and consumer response

H₁₁: CBBE of automotive brands mediates the relationship between social media promotion and consumer response

H₁₂: CBBE of automotive brands mediates the relationship between social media interactive marketing and consumer response

H₁₃: CBBE of automotive brands mediates the relationship between social media word-of-mouth and consumer response

3.2 Research Approach

Research approach involves formulating specific methods of carrying out research in a way that suits the objectives of the study and aligns with the research questions (Creswell, 2009). This is because a research approach illuminates the roadmap of a research and guides the researcher to achieve its objectives (Hair, Bush & Ortinau, 2003). According to Myers (1990), there are two types of research approach; positivism and interpretivism. This study employs the positivism research approach.

The positivist researchers believe that social phenomena can be explained in cause-and-effect relationships (Creswell, 2009). In addition, the deductive method is adopted by the positivist researcher, which is conducted through testing of hypotheses. Hypotheses are developed through theory and previous empirical findings and based on the connection between variables (Creswell, 2009). In addition, the deductive approach allows the researchers to infer generalizable conclusions from the interpretations of the findings drawn from the hypotheses tested. The findings of the hypotheses are then used to test or validate the perspectives of existing theories (Bryman & Bell, 2007). The positivist approach is one of the most widely used paradigms in many social science researches (Neuman, 2014). According to the assertions of Churchill (1979), there is no unitary method

for solving a given problem. Therefore, a mixed-method research approach is adopted in this study. The essence of adopting a mixed-method approach is to ensure that the alterations in the process of data collection reflect the reality of the study.

Creswell (2007) stressed further that a mixed-method research approach is more apt to the interdisciplinary nature of research like this study, which spans between communications and marketing disciplines. In executing the mixed-method approach, data is gathered using both the quantitative and the qualitative approaches in a sequential manner. The qualitative aspect of the study is mainly conducted to validate the measurements of CBBE of automotive brands, Social Media Marketing Communications (Social media advertising, Social media promotions, Social media interactive marketing and Social media word-of-mouth) and Consumer Response. Subsequently, the quantitative aspect is used to collect primary data for testing the relationships between the variables understudied in this research.

The quantitative method using survey design avails the researcher the opportunity to measure reality without getting involved in the study, thus minimizing response bias (Sekaran & Bougie, 2013). Quantitative research allows generalization of findings by including every component of the population in the study through the careful selection of a representative sample. Meanwhile, the qualitative research approach through the in-depth interview avails the informants the opportunity to express their personal opinions, thereby enabling the researcher to explore the issues of “why?” and “how” in-depth. Hence, the in-depth interview is conducted to fulfill the qualitative approach, while survey design is employed to fulfill the quantitative

approach. The designs of these two approaches are discussed in details in the following section.

3.3 Research Design

This study employs a mixed-method research approach. According to Creswell (2007), there are four basic aspects to designing mixed-method research approaches; time, weight, mixture and theory. With respect to timing, both qualitative and quantitative research approaches can either be run concurrently or sequentially, with either of them coming first and the other coming later. This is followed by the weight of mixed-methods. Weight refers to the priority accorded to either of the approaches, while mixing refers to the phase of the procedure at which the mixing was done. The mixing aspect is connected when the analysis of an approach is used to identify participants for data collection for the other, but integrated when both qualitative and quantitative researches are conducted concurrently with the text in the qualitative design transformed into counts, while the counts are compared with the ‘descriptive quantitative data’ (p.206). Lastly, the mixing is said to be embedded when the focus of the study is to collect data primarily using a particular design with the intention of obtaining supportive information from the each other, also described as “dominant-less dominant design”.

By theorizing, Creswell (2007) explained that the amount of theoretical perspective (explicit or implicit) that guides a study also influences the mixed-method design. As explained in the penultimate chapter, the proposed theoretical framework in this study is implicitly driven by the CSRM. The proposed framework in this study is

implicitly driven by the CSRM because the variables of the proposed framework are not directly adopted from the constructs of CSRM, rather the proposed framework in Figure 2.5 reflects the interpretation of CSRM in the realm of marketing communications and brand management. Hence, the proposed theoretical framework conforms to the inherent proponents of the CSRM by explaining how consumers' psychologies (mindsets) and perceptions are enhanced through communications, which subsequently lead to favorable responses.

Justifiably, this study adopts a dominant-less dominant design of the mixed method in a Sequential Explanatory approach (Creswell, 2007). This design implies that the qualitative research approach is less dominant and the quantitative research approach is dominant and is employed to answer the research questions. In this case, the qualitative data collection using in-depth interview comes first before conducting the quantitative method using survey design. The in-depth interview was conducted among ten (10) informants, comprising of users of automotive brands, brand managers and social media users. Following the guidelines laid down by Churchill (1979) and DeVellis (2003) the data collected through the in-depth interviews were reported as one of the stages of measurement development, validation and purification processes. Meanwhile, the survey design serves as the main data collection technique for answering the research questions and fulfilling the research objectives. Figure 3.1 provides an illustration of the study design.

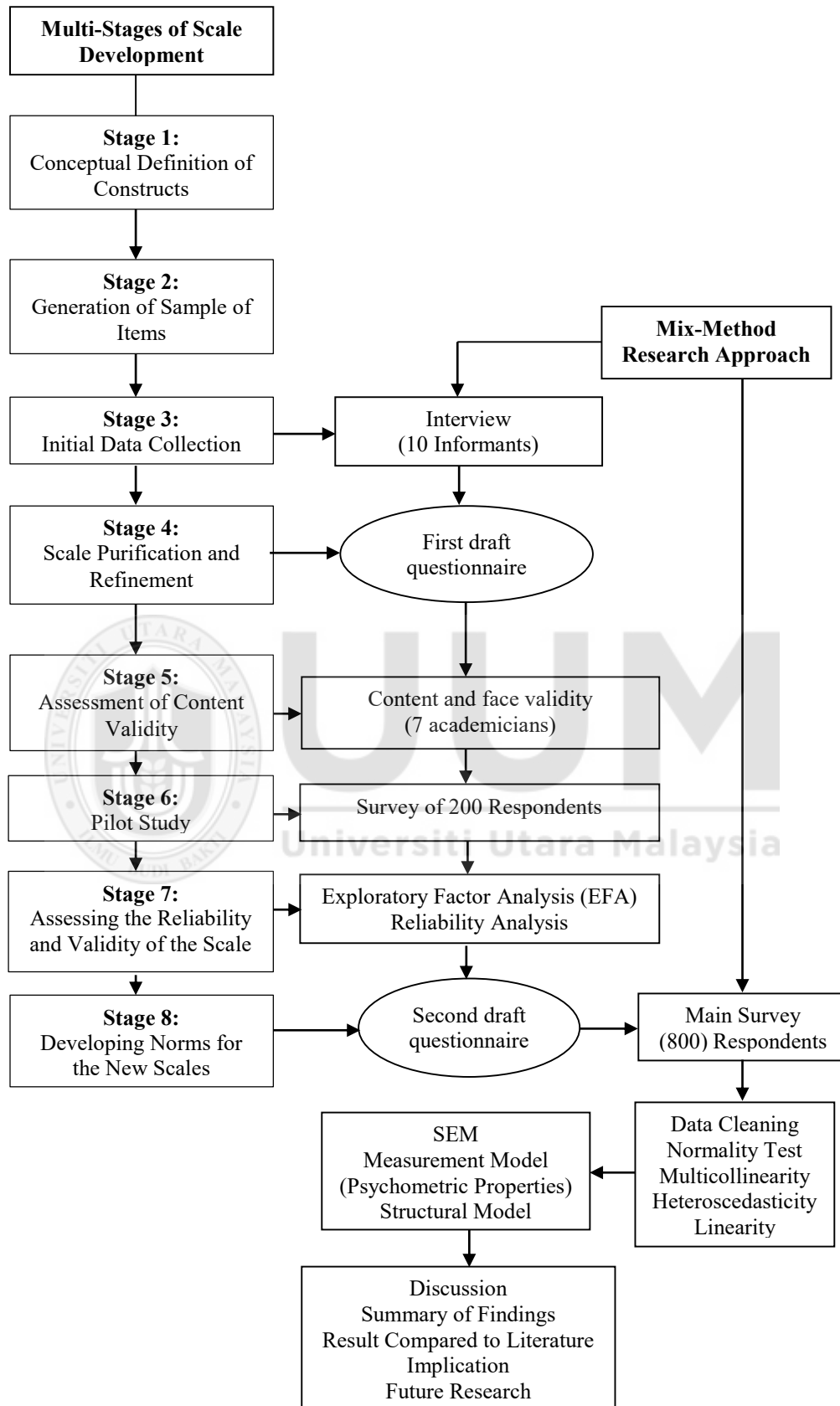


Figure 3.1. Research Design Framework

The Figure 3.1 presented the research design in a chronological flow. The figure guides the activities of the research from the multi-stages of item development through qualitative interview and the quantitative survey. The following sections present the individual elements of the framework.

3.4 Multi-Stages of Items Development and Validation

According to theorists of measurement development and validation of items from the disciplines of consumer behavioral research, marketing and management unanimously assert that developing measurement items involves a series of sequential activities (Churchil, 1979; Lewis, Weiner, Stanick, & Fischer, 2015; Mackenzie, Podsakoff, & Podsakoff, 2011). More relevantly, Churchill (1979) outlined a list of eight procedures involved in measurement development which are (1) specifying domain of construct, (2) generating sample of items, (3) collecting data, (4) purifying measures, (5) collecting data, (6) assessing reliability, (7) assessing validity and (8) developing norms. These procedures are adapted in this study as depicted in Figure 3.1 are presented in the following sections.

3.4.1 Stage 1: Conceptual Definition of Constructs

This stage essentially depends on the literature review presented in Chapter Two. Numerous journals were consulted and reviewed to conceptually define the constructs understudied in this research. Table 1, 2 and 3 presented in Appendix A summarize the definitions and the sources of the constructs as well as the dimensions that were adopted for measuring them. As depicted in Table 1 in Appendix A, relying on the general models of CBBE validated by both Bruhn, Schoenmueller &

Schafer (2012) and Baalbaki and Guzman (2016), the CBBE for automotive brands is measured with four dimensions; brand awareness, hedonic brand image, functional brand image, and brand sustainability. These dimensions were adopted as reflective measures for automotive CBBE in this research. In specific terms, automotive CBBE is defined as consumers' knowledge and perceptions of the brand awareness, hedonic brand image, functional brand image and brand sustainability of automotive brands.

In other words, the automotive CBBE is developed to measure consumers' mindsets towards automotive brands in a way that reflect the basis and the reasons consumers consider an automotive brand as their favorite brand. Additionally, the automotive CBBE measures reflect the consumer's justification for considering the purchase of or preferring an automotive brand. Thus, automotive CBBE fundamentally explains why consumers like or dislike an automotive brand. The similarity between the definition of automotive CBBE and the general definition of CBBE as conceptualized by Aaker and Keller and validated by a number of previous researchers is that automotive CBBE and the general CBBE fundamentally mirror consumers' perceptions and mindsets as the underlying basis for purchasing or preferring a brand. The difference between automotive CBBE and the general CBBE is that the indicators of automotive CBBE are based on the specific parameters that are directly related to automotive products, such as the engine, body, interior and mechanical maintenance.

Social media marketing communications are categorized into two types; FCC and UGC. In this study, following the definitions of several types of marketing communications presented by Keller (2009), this research adopts social media

advertising, social media promotion and social media interactive marketing as types of FCC, while social media word-of-mouth is adopted to represent UGC. The findings of some previous studies have focused on varying characteristics of social media contents such as video, audio and images as well as different platforms such as *Facebook*, *Twitter* and *YouTube* towards the aim of studying the impact of marketing communications. This study however contextualized the different types of marketing communications such as advertising, promotions, interactive marketing and WOM into the purview of social media communications. Hence, the conceptualization of social media marketing communications in this study is limited to the types of marketing communications that are disseminated through social media platforms, including *Facebook*, *YouTube*, *Instagram* and *Twitter*. Table 2 in Appendix A presents the operationalization of social media marketing communications in this research.

Finally, Table 3 in Appendix A presents the operationalization of consumer response by adopting purchase intention and brand preference as reflective measures of consumer response. This study specifically relies on the theoretical definitions of purchase intention by Buil, Martínez and Chernatony (2013) and brand preference by Baalbaki and Guzmán (2016).

3.4.2 Stage 2: Generating Sample of Items

Sequel to the definitions presented in the section above, this section focuses on proposing sample of items for measuring the defined constructs. Items that were relevant to the conceptual definitions highlighted above were adopted in this study.

To be specific, 67 items were adopted to measure all the four dimensions of CBBE for automotive brands. Specifically, 7 items were adopted from Yoo and Donthu (2001), Hanaysha and Hilman (2015) and Brunello (2015) to measure brand awareness in terms of brand recognition and brand recall of logo, name, characteristics and personality of automotive brands. 23 items were adopted from Bruhn, Schoenmueller and Schafer (2012), Verhoef, Langerak and Donkers (2007), Baalbaki and Guzman (2016) and Brunello (2015) to measure the hedonic brand image of automotive brands. The items adopted were specifically relevant to the characteristics of automotive products. The measures of hedonic brand image entail the personality, social value, reputation and attractive attributes of automotive products. 31 items were proposed to measure functional brand image. The items adopted from Baalbaki and Guzman (2016), Verhoef, Langerak and Donkers (2007), Kartono and Rao (2005), Brunello (2015) and Fetscherin and Toncar (2009) to measure functional brand image entail consumers' perceptions of satisfaction, perceived quality and performance of automotive products. Finally, 6 items were proposed to measure brand sustainability as adopted from Baalbaki and Guzman (2016), Kartono and Rao (2005) and Fetscherin and Toncar (2009). The items cover both financial and environmental sustainability of automotive products. Table 4 (see Appendix A) features the items adopted for measuring the dimensions of CBBE of automotive brands.

The items for measuring social media marketing communications were adopted from previous studies on the conventional marketing communications. Among the marketing communications categorized under FCC, Social media advertising was

proposed to be measured with 12 items adopted from Bronner and Neijens (2006) and Buil, de Chernatony, et al. (2013), with a focus on the experience and attitude of social media users towards advertising. Seven (7) items were adopted from Yoo, Donthu and Lee (2000), Keller (2009) and Buil, de Chernatony, et al. (2013), and proposed to measure social media promotions. The items for measuring social media promotions include both monetary and non-monetary promotional appeals on social media platforms. Finally for FCC, social media interactive marketing was proposed to be measured with 8 items adopted from Keller (2009) and Kim & Ko (2012). The items focused on how directly and indirectly social media platforms influence connections with brands and evoke purchase.

As a representation of UGC, social media word-of-mouth was proposed to be measured with 6 items adopted from Jalilvand and Samiei (2012). The items focused on the influence of consumers' comments, reviews, and usage experiences posted on other consumers' purchase decision. Table 5 (see Appendix A) presents the items adopted for measuring the dimensions of social media marketing communications in this study.

Consumer response is determined with two dimensions; purchase intention and brand preference. Purchase intention was proposed to be measured with 4 items adopted from Brunello (2015). The items were adopted because of their relevance to the definitions presented in this study. Items for measuring purchase intention focus on first purchase, repurchase and recommendations to others. Finally, brand preference was measured with 4 items as adopted from Baalbaki and Guzman

(2016). The four items focused on customer first choice, loyalty and commitment. Table 6 (see Appendix A) presents the statements of the adopted items from previous studies for measuring the dimensions of consumer response.

3.4.3 Stage 3: Initial Data Collection (Interview)

At this stage, following the multilevel scale development methodology explained in Section 3.3, semi-structured interviews was conducted for the development of additional items and for validating the adapted items from previous studies to the context of this research. For this purpose, 10 semi-structured interviews were conducted among one (1) sales manager, two (2) brand managers and one (1) branch manager from different automotive companies in Malaysia. Also, six (6) automotive and social media users were interviewed over the period of three weeks. These informants were selected based on their specific knowledge of the subject matter (Braun and Clarke 2006). Additionally, following the approach adopted by Bartholme and Melewar (2014) and based on the recommendation presented by Churchill (1979) the informants selected for the interview in this study were specifically selected as a sample of persons who can offer insights and experience-based understanding of the concept of CBBE in the automotive industry and their perception of the role of social media communication in developing CBBE. As such, brand, sales or branch managers were selected based on their role and experiences in generating marketing communications on social media. Social media users were selected on the basis of their ability to comment on social media marketing communications based on their previous experiences and encounters of marketing

communication contents on social media platforms as well as their associations with automotive brands.

In line with the common qualitative research principles, the absolute number of informants is subject to saturation. Saturation is attained when further interviews do not reveal any new information. However, Creswell (2007) suggested that a minimum number of 8 informants is required in a qualitative study. Furthermore, the researcher observed that the responses of the informants had reached saturation by the tenth interview. As such, in consonance with previous qualitative studies, a total number of 10 informants are sufficient for this kind of research (Holliman & Rowley 2014). Table 3.1 presents the profiles of the informants, durations of the interviews and dates of interviews. In view of the confidentiality agreement between the researcher and the informants as signed in an Interview Consent Letter (Appendix B), numbers were assigned to the informants and the real names of informants and the companies of the informants were not revealed.

The questions of the interviews explored informants' understandings and experiences about brand equity, automotive CBBE, social media marketing communications and consumer responses. The items adopted from previous studies as presented in Section 3.4.2 in order to validate the items in the context of this study (See Appendix C for the Interview Guide) were shown to the informants during the interview. However, additional questions were promptly inserted during the interview, based on the responses of the interviewees. Hence, the interviewer did not limit the debriefing to the questions that were listed in the interview guide. Instead,

the interviewer probed deeply to gather all the thoughts and opinions of the informants with regards to the subject matter (Bryman & Bell, 2007). Before conducting the main interviews, three pilot interviews were conducted. The pilot interviews allowed the researcher to pre-test the interview among researcher-colleagues to establish content validity (Saunders et al. 2008). The pilot interviews yielded a fine-tuned and refined interview guide. They also helped to determine the appropriate time for conducting the main interviews. Subsequently, the interview with the briefest duration lasted for about 24 minutes while the longest lasted for about 53 minutes. Before the commencement of the interviews, the interviewees were shown the interview guide and were informed of the purpose of the interview. The informants were given sufficient time to prepare their responses.

Finally, this study employed a thematic analysis of the interview transcripts. The thematic analysis allows the researcher to identify relevant themes and perspectives (Creswell, 2007). Additionally, following the dimensions suggested in the definition of CBBE for automotive brands provided in the literature review sections and the types of contents based on FCC, UGC and consumer response, the responses were grouped and categorized using the deductive content analysis and the sorting and coding of themes was done using NviVo 11 software.

Table 3.1
Informants' Profile

Informants	Occupation	Duration	Date
1	Lecturer	28 minutes and 54 seconds	3 November 2016
2	Reporter	47 minutes and 47 seconds	20 November 2016

Table 3.1 Continued

3	Sales Manager	40 minutes and 46 seconds	23 November 2016
4	Hotel Manager	40 minutes and 9 seconds	23 November 2016
5	Branch Manager	24 minutes and 23 seconds	1 December 2016
6	Brand Manager	52 minutes and 55 seconds	7 December 2016
7	Graphic Designer	23 minutes and 15 seconds	3 December 2016
8	Brand and Sales Manager	53 minutes and 22 seconds	3 December 2016
9	Petroleum Engineer	27 minutes 4 seconds	4 December 2016
10	Brand Manager	29 minutes 7 seconds	3 December 2016

The primary objectives of the interview as stated above was to clarify the definitions of the variables and concepts understudied in this research and also to generate additional items for measuring the concepts based on the understanding of the informants (Cheryl Burke Jarvis et al., 2003; Churchill 1979; Lewis, Weiner, Stanick, & Fischer, 2015; Mackenzie, Podsakoff, & Podsakoff, 2011; Polit & Beck, 2006; Rubio, Berg-Weger, Tebb, Lee, & Rauch, 2003). With regards to Automotive CBBE, all the informants agreed with the definitions of automotive CBBE. The informants all agreed that automotive products can be branded and branding is important for automotive products. They explained that people buy car brands because of their perceptions of the brand. For example, Informant 2 believes that Honda is a successful automotive brand and she demonstrated her belief by stating that; “Brand is important because.... Like Honda, Honda is for successful [people], not like Proton. Proton is for ordinary people who do not have much money”. Informant 8 explained the importance of automotive brand by saying; “Toyota is

sold by its brand [even though] it does not have good quality and is [sometimes] not up to standard, but people still buy Toyota because of the brand”.

Informant 6, who is a Brand Manager at PERODUA explained that “...Basically our Malaysian people buy cars because of brand, otherwise [they buy] because of price”.

Informant 3 has a similar submission, stating that “...Over here in Malaysia, most of the people buy branded cars like *BMW* because they want to show others that they are wealthy”. In the words of Informant 2, she believes Honda is a branded automotive product because according to her; “...Hmm...*Honda* seems like you have more money...it shows you are rich and it shows [users’] personality”. Also, Informant 5 concurred that it is difficult to promote or market an automotive brand without successful brand equity. He stated that “[consumers] are very skeptical about unbranded cars”. This buttressed the importance of branding to automotive products.

The informants showed that they understand what automotive CBBE means when their responses were compared with the theoretical definitions. For instance, Informant nine (9) stated that “[brand means] something that is well known globally”. Meanwhile, Informant seven (7) said that “brand is actually a logo, sometimes you don’t even have to put a name, but when you have a logo and people will know [the brand]. The submissions of Informant nine (9) and Informant seven (7) reiterated brand awareness as one of dimensions of CBBE. In addition, when asked about the definition of automotive CBBE, Informant 10 stated that “quality and performance of cars” are the keywords for explaining automotive CBBE. Meanwhile, Informant four (4) stated that “brand is the name of a product” when asked about the definition of automotive CBBE. Informant two (2)’s definition is

akin to other informants, stating that automotive CBBE means “the body or the physical quality of the car [brand]”. In summary, the informants believed that brand equity is the reason consumers like or buy automotive products. For instance, Informant one (1) explained that: “I believe there is always a reason for liking an automotive brand. [For example,] I like PERODUA, because it is made in Malaysia and Mercedes-Benz because of the quality and because it gives class”.

Majority of the informants agreed to the importance of brand awareness as one of the dimensions of automotive CBBE. Brand awareness in the context of automotive products, according to the majority of the informants, involves knowing about the country of origin, brand name, symbol, logo, brand characteristics and personality of an automotive brand. Informant five (5) said; “Yes, personality of a car is very important... when people look at the car they say wow... it catches their mind”. However, there are few respondents who argued that brand awareness is not that important for automotive brands. These informants opined that some buyers do not necessarily know the difference in the characteristics of automotive brands before buying them. Informant three (3) can be quoted thus; “Awareness is not necessarily important. [Because] customers come to us, and say: I would like to look for ALZA and this is PROTON... You see? Then what car do you have...ok we have SAGA. Then [the customer] changes his mind and buys the car. Meanwhile, Informant 10 insisted that recognizing characteristics is important, because according to him, “...nowadays, most of them [cars] are similar... users need to know the characteristics of the car [brand].

Similarly, Hedonic brand image was confirmed as an important factor for explaining automotive CBBE. Specifically, the informants emphasized the importance of good brand image in terms of reputation for quality, fashion, desirability, attractiveness, reliability, unique features, market leadership and brand popularity. Some informants also added that the uniqueness of a car brand adds to its CBBE. Also, the informants argued that one of the essential elements of hedonic image of automotive products includes knowing how well a car brand fits the user's demographic profile. For example, Informant 3 explained that;

“...For example, MyVi was built to be beautiful. This is what I know from the consumers and users such as ladies and some teenagers because they like the design. ...Both [PERODUA and PROTON] have 1.3 engines. Most old people around the age of 30 and above will go for PROTON, SAGA or SEDAN, whereas all the youngsters and ladies will go for MyVi”.

The illustration by Informant 3 affirms that certain automotive brands appeal to users based on their demographic attributes. However, the informants are evenly divided on the importance of social acceptance. Some informants agreed that social acceptance and approval are relevant measures of hedonic brand image for automotive products. Meanwhile, some other informants disagree, stating that cars are bought for necessity and not to improve the social status of the buyer. To put this succinctly, in the words of Informant 5; “Nowadays, cars are more of necessities. If you buy a luxury car [you can be kidnapped suddenly]”. Informant 10 added that; “My intention [for buying an expensive car brand] is not for showing off to people, because I buy cars for necessity”. With regards to social approval, Informant 4 stated

that; “I want to disagree but it is true...but no, I won’t buy a car because of people’s impression. I don’t care about that.” when asked about the relevance of social approval and people’s impression in measuring hedonic brand image of automotive CBBE. Finally, majority of the informants do not believe in corporate cars as part of the measurement of hedonic brand image. Many of the informants advised for the item to be removed.

Informants in this study also agreed with functional brand image as a dimension for measuring automotive brand equity. Informant 1 said the following when explaining the importance of functional brand image:

“...the most important thing when we are buying or when we like a brand is its functions. That is why functionality is the most important for me rather than awareness and hedonic [brand] image. So for me, functional brand image comes first, then brand awareness and then hedonic brand image”.

For measuring functional brand image, informants agreed with majority of the items presented to them. Most of the informants agreed that the performance of a car engine, body, interior and trunk are elements of the functional image of a car. Many informants believed that even though they do not have the technical knowledge to discover good or reliable functional cars, they are concerned about the functionality of the mechanical components of the cars they are buying. Informant two (2) said the following, when she was asked about the importance of engine quality of cars as one of the items of functional brand image; “I don’t know the quality of car engines, but I agree that engine power, good transmission and mechanical quality are also

important”. Among the highlights of the functional brand image which entails brand structure and paint, there is a mixed reaction about the importance of car colors. Many informants agreed to its importance. For instance, Informant 8 stated that;

“Body colors are important for some cars because not all manufacturers come out with certain colors. They [the manufactures] got one killer color for Isuzu, [they] call it LuLu brown. For Toyota, they are good in white color. Honda tilts more to the black color because we must match the brand, the logo and also the color for people to accept”.

Informant 8 added that car colors are part of what contribute to the uniqueness of cars and not the functionality of cars. Meanwhile, in contrast to that, Informant two (2) stated that “I don’t care about car paint. I can use any color but not pink”. In summary, the informants unanimously agreed to the importance of measuring automotive CBBE with the inclusion of performance, quality of engine, interior, body and trunk as part of the most important dimensions of CBBE of automotive products.

Following functional brand image is brand sustainability. Many of the informants understood brand sustainability to be economic maintenance. In fact, some informants suggested that economic maintenance explained the researchers’ opinion than brand sustainability. For instance, Informant three (3) argued that; “Malaysians consider the maintenance of cars before the sustainability. [I advise you to] change sustainability to maintenance”. However, some other informants agreed with the idea of brand sustainability as a dimension for automotive CBBE. For instance, Informant

one (1) supported the idea of brand sustainability by saying; “Brand sustainability is something new, which is what we are still educating people about...safety and then environmental responsibility...I think brand sustainability is one of the most important things”. Informant two (2) added that; “I don’t like a car that brings out too much smoke. So, it is important that the car must be environmentally safe and responsible”.

The informants in this study were generally in support of economic sustainability in terms of fuel consumption and mechanical maintenance of automotive products, as well as the environmental responsibility and safety responsibility of automotive products. For example, Informant five (5) explained that “Efficient fuel usage is very important...it must be economic. Even if you are buying a big car, it must be economic”. In conclusion, majority of the informants in this study agreed with the CBBE concept of automotive products. The understandings of the informants are widely unanimous, especially with regards to the dimensions. Table 3.2 presents the list of items that were generated from the discussions of informants, together with quotes which suggest the inclusion of the items.

Table 3.2
Items Generated from Interview for Automotive CBBE

Items	Source Quotes
Brand Awareness	
The car brand is well known globally.	Informant 9: Brand equity is something that is globally well known.
I know the country of origin of the car brand.	Informant 1: I like PERODUA, because it is made in Malaysia. Informant 7: People go for Honda, Toyota, Mercedes and BMW because they are from certain countries.
Hedonic Brand Image	
The car brand is affordable.	Informant 2: They see that it is an affordable car. Informant 5: Let’s say it is a popular car, then we must see the

	price, you know? Some people cannot go for every car that is popular.
	Informant 7: What is most important for Malaysians is the looks. If it is cheap, durable, and if they can afford to purchase, they will purchase.
	Informant 9: Yes, it has to be affordable.
	Informant 1: A car must be affordable.
The car brand makes its users unique.	Informant 2: But I like to use my Kia because there are not many people using it. So it is easy for people to notice me. I like to be unique.
The car brand befits people in my age group.	Informant 3: ...For example, MyVi was built to be beautiful. This is what I know from the consumers and users such as ladies and some teenagers because they like the design. ...Both PERODUA and PROTON have 1.3 engines. Proton Saga is a Sedan. Mostly the old people around the age of 30 and above will go for PROTON SAGA or SEDAN, whereas all the youngsters and ladies will go for MyVi.
The color of the car brand is unique.	Informant 8:so it is better to use unique colors and not attractive colors
Brand Sustainability	
The car brand is ecofriendly.	Informant 3: White engine is the green engine (ecofriendly) and black engine is not ecofriendly.

According to the responses of the informants in this study, it was revealed that social media marketing communications are important types of communication activities corporate organizations engage in in recent times. The two types of social media marketing communications - firm-created contents and user-generated contents - were also discussed. The informants also agreed with the dimensionality of social media marketing communications and their understandings of the different functions of the types of social media marketing communications (such as advertising, sales promotions, interactive marketing and word-of-mouth). Majority of the informants agreed that they are aware of social media marketing communications in its two forms; firm-created and user-generated contents. Social media marketing communications is also believed to cut across all the various types of social media;

Facebook, YouTube, WhatsApp, Instagram and Twitter. The informants emphasized that the two types of social media marketing communications are influential to the development of brand equity. To support this, Informant eight (8) stated that;

“...let’s say for Facebook, when we post, 200 people or 100 people will share, then it becomes like 2000 views. Then at 2000, they share, they talk to each other and they make their own comparisons, such as, [they realize] Toyota [has certain attributes different from] that [of] Isuzu [and] Mitsubishi. That is how we have to convince people we have the highest technology compared to other [car brands]”.

Informant two (2) also claimed that “...also I see people advertise things such as cars, clothes, food and some services on *Facebook* and *Instagram*”. Many of the informants who were brand managers, branch managers or sales managers explained that one of the significant features of social media marketing communications which make social media more important than traditional media is the function of sharing among users. This function makes marketing messages travel wider and with much higher rates of reception with the help of consumers sharing among themselves. Informant one (1) supported the significance of sharing social media communications and comments by stating that “...because in social media, for sure we can post comments, share with each other and also tag someone that we like. So it becomes a more interactive type of marketing”.

With regards to the attitudes and experiences of informants towards social media marketing communications, majority of the informants responded positively. Many

informants agreed that social media advertising increases awareness, generates sales, gives useful information and influences purchase decision. Above all, creativity was said to be the most important attribute of social media advertising. According to Informant 2, she argued that “creativity is what attracts me to advertisements on social media”. However, some informants disagreed with some of the items measuring attitudes towards social media advertising. Many respondents disagreed with the experiences of “sad”, “expensive” and “irritated” as parts of the measurements of social media advertising. Informant 1 for example, stated that “I don’t know about the expenses or the price of the advertisement because I am not the producer of the ads”. Meanwhile, Informant 2 stated that “the advertisement is for getting information, so I never feel irritated”. Informant 4 also added that “well, you know I am used to it. I am not irritated by it, so I don’t think advertisements can irritate or disturb me”.

Similarly, social media sales promotion is regarded as an important type of social media marketing communications. Many informants affirmed to the presence of sales promotions in the forms of vouchers, discounts, incentives, promotion information, test driving and price deals on their social media pages. However, few informants discussed the issue of trust on the significance of sales promotions. Informant two (2) for instance stated that “I don’t like when they give offers and sales discounts. I don’t believe them”. Hence, the audience belief and trust is considered an important type of attitude or experience users of social media have towards social media sales promotions.

In addition, all the informants in this study agree with the presence of interactive marketing on social media. They believed that through social media interactive marketing, they have the opportunity to get to know more about brands. Interactive marketing on social media according to the understanding of the informants is often the types of content that link the social media users to either the social media page of the brand or the original website of the brand. To buttress this point, Informant two (2) said that “interactive marketing on social media is important. I also went to KIA page before to see their new products, and because I want to get more details”.

Finally, informants also testified to the pervasiveness of social media word-of-mouth. Many of the informants agreed that the information shared by social media users are important in making their purchase decisions, and they also influence the development of CBBE of automotive products. The informants agreed that before purchasing high involvement products like cars, they consult people on social media and request for their personal experiences of the brand. For instance, Informant two (2) shared the following:

“I believe so. I have seen something like that. In fact I do it sometimes. I talk about the product I am using on social media. I say KIA is safe, the body is strong and so on. I even say to my friends on social media to buy KIA...Also, I see my friend post pictures about his KIA and I feel like I want to buy it”.

He also added that; “Actually, I buy this swift after I do some research about it on social media”. The items that were extracted from the discussions of the informants are presented in Table 3.3.

Table 3.3

Items Generated from Interview for Social Media Marketing Communications

Items	Source Quotes
Social Media Sales Promotions	
Service deals are given on social media.	Informant 1: Yes, especially like they have promotions during Hari Raya, something like going to your nearest PROTON service center to service your car.
Table 3.3 Continued	
I don't believe the sales deals offered on social media.	Informant 2: I don't like when they give offers and sales discount. I don't believe them.

The final phase of interview entails the consumer responses in terms of how brand purchase intention and brand preference describe their behaviors towards social media marketing and CBBE of automotive products. The informants explained that when a brand appeals to them, they tend to purchase the brand, recommend the brand and prefer the brand to other brands in the market. However, many informants disagreed with repurchasing an automotive brand because its marketing communications appeals to them or because its brand is successful.

3.4.4 Stage 4: Scale Purification and Refinement

Following the outputs from the preceding stages, especially the item generation and initial data collection stage, this stage presents the development of the items in relation to the context of this study. The interview conducted helped the researcher to refine and contextualize the items adopted from previous literature as well as the items generated through the semi-structured interview. Majority of the items adopted were approved by informants, though there were a few more items generated from the interview. For instance, six items were created for automotive CBBE. Specifically, two items (CBBEBA8 and CBBEBA9) were added to brand awareness,

making the measures of brand awareness add up to nine (9) items. Meanwhile, two items (CBBEHBI1 and CBBEHBI22) were refined through the responses of the informants. Also, two more items (CBBEHBI23 and CBBEHBI24) were added to hedonic brand image, making the items of hedonic brand image add up to 24. Furthermore, one item (CBBEBS7) was added to brand sustainability, making the items add up to seven (7) items. Finally, in total, 74 items were proposed to measure CBBE of automotive brands.

With regards to social media marketing communications, the 12 items proposed from literature reviews for social media advertising were reworded to suit the focus of this study. Subsequently, the 12 items were reduced to eight (8). For social media promotions, two items (SMP8 and SMP9) were added to the measures of social media promotions, making its items to be nine (9). Finally, the measures of consumer response were reworded and refined, leading to the reduction of the items measuring consumer response to eight (8). Table 4 presents the items generated from both literature review and interviews.

3.4.5 Stage 5: Content Validity

In this section, the content validity of the items was examined. According to experts such as Churchill, (1979), Lewis et al. (2015) and Mackenzie et al. (2011) , content validity is examined to determine the adequacy of items in measuring the conceptual interpretation of the construct they are representing. In this study, the content validity of the items and the developed scale are examined by employing the approach suggested by Polit and Beck (2006). Thus, the Content Validity Index (CVI) of both

the item-level and the scale-level CVIs were calculated from the ratings of experts. The item-level CVI involves the validity of the items while the scale-level CVI signifies the validity of the scale. The content validity form (See Appendix E) was sent to seven (7) experts in the disciplines which are directly or by extension related with the variables understudied in this research. The experts were drawn from Marketing, Communications and Research Methodology disciplines.

According to the submissions of Polit and Beck (2006), calculating CVI from the ratings of 7 experts is considered appropriate, because more than 10 experts is considered unnecessary. The experts were provided the objectives of the research and the conceptual definitions of variables which were measured. The experts were requested to rate the relevance of the items with regards to the constructs under which the items were placed. The experts were provided a 4-point scale using the following labels: 1 = “not relevant”, 2 = “somewhat relevant”, 3 = “quite relevant” and 4 = “highly relevant”. Finally, the experts were provided two types of comment boxes to provide additional comments on the items and on the overall scale.

The Item-Level CVI was calculated by converting both 1= “not relevant” and 2 = “somewhat relevant” ratings to 0 and 3=“quite relevant” and 4=“highly relevant” to 1. Thus, every 1 and 2 ratings from the experts were counted as 0 and every 3 and 4 ratings were counted as 1. The total number of items rated relevant was divided by the total number of raters (7 in the case of this research). According to Polit and Beck (2006), an acceptable Item-Level CVI for raters more than six is 0.83. The results of the Item-Level CVI calculations were used to delete items that were rated

not relevant. Appendix 3.5, 3.6 and 3.7 show the results of the Item-Level CVI. The results showed that majority of the items scored 0.85 and above. The items that scored lower than 0.85 were deleted from the scales.

Additionally, Polit and Beck (2006) suggested using the average of the Item-Level CVI for calculating Scale-Level CVI. Thus, Scale-Level CVI was calculated by the mean of every item rated relevant divided by the total number of items. An acceptable Scale-Level CVI according to Field (2009) is 0.90. The results presented in Appendix D showed that all the scales have Scale-Level CVIs more than 0.90, indicating content validity of the overall scales.

However, one item was eliminated from brand awareness, reducing the number of items for measuring brand awareness to eight (8). Furthermore, seven (7) items were deleted from the measures of hedonic brand image, reducing the measures to 17 items. Meanwhile, three (3) additional items were suggested by the experts to be added to brand sustainability, making a total of 10 items. Finally, three (3) additional items were added to the measures of social media word-of-mouth making a total of nine (9) items as suggested by the experts. However, no items were deleted from the measures of social media marketing communications and consumer response.

Table 3.4 presents the summary of the content validity by indicating the items that were dropped, the items that were added based on the suggestions from experts and finally, the number of items that were retained. In addition, the comments box provided in the content validity form allowed the experts to make suggestions on

how to improve the clarity of the items by suggesting better synonyms to certain technical words. Conclusively, the items for measuring CBBE for automotive brands were 69 and the number of items for the remaining variables remained the same.

Table 3.4
Summary of Content Validity Results

Variables	Dropped Items	Suggested Items	Number of Retained Items
Automotive CBBE	CBBEBA8 CBBEHBI12 CBBEHBI13 CBBEHBI14 CBBEHBI19 CBBEHBI22 CBBEHBI23 CBBEHBI24	3	69
Social Media Advertising	None	None	8
Social Media Sales Promotion	None	None	9
Social Media Interactive Marketing	None	None	8
Social Media Word-of-Mouth	None	3	9
Purchase Intention		None	3
Brand Preference		None	4

3.5 Population for the Main Survey

Population is defined as the total number of people a study aims at studying (Sekaran, 2012). In other words, population is the group of people who are the subjects of a study, from which a sample is drawn (Babbie, 2012). It is regarded as one of the crucial research fundamentals that comprise common characteristics of all the individuals in the group. As such, population is the context and the target of a study (Ghani, 2012). In other words, the target population of this study is made up of car users in Malaysia. According to statistics published on the official portal of the Malaysian Road Transport Department (JPJ), there are more than 21 million

registered passenger cars across the 13 states of Malaysia. However, in order to capture the objectives of this study, this study focuses on four automotive brands; PERODUA, PROTON, TOYOTA and HONDA, which have been the market leaders and the most popular of automotive brands in Malaysia over the years (Ghani, 2012). Furthermore, a content analysis of the social media pages of various automotive brands in Malaysia conducted by Kormin and Baharun (2016) justified that these four selected brands have the most predominant presence on various social media platforms, such as Facebook, YouTube, Instagram and Twitter in Malaysia. Also, as shown in Figure 3.2, these four automotive brands are selected because they are evidently the market leader in the automotive industry as they recorded the highest number of sales for passenger cars in the years 2016. The selection of multiple brands in this study is based on relevance and variance criteria, which has been a common approach among previous studies with similar objectives as a method for “reflecting reality more precisely” (Bruhn et al., 2012). Therefore, the users of PERODUA, PROTON, TOYOTA and HONDA in Malaysia are the population of this study.

Brand	Total Sales			Kawasan Voted			Commercial Vehicles		
	August	July	YTD	August	July	YTD	August	July	YTD
Perodua	16,589 ↓	17,957	143,048	16,589 ↓	17,957	143,048	0 -	0	0
Proton	9,040 ↓	10,867	70,113	9,040 ↓	10,867	70,113	0 -	0	0
Toyota	8,101 ↑	7,308	54,205	5,634 ↑	4,976	37,187	2,467 ↑	2,332	17,018
Honda	6,853 ↓	8,443	58,892	6,853 ↓	8,443	58,892	0 -	0	0
Nissan	3,705 ↓	4,165	31,164	3,202 ↓	3,675	27,912	503 ↑	490	3,252
Mazda	1,192 ↓	1,333	9,107	1,130 ↓	1,261	8,419	62 ↓	72	688
Isuzu	1,090 ↑	1,052	7,902	69 ↓	98	294	1,021 ↑	954	7,608
Mercedes	1,033 ↓	1,050	7,316	1,005 ↓	1,029	7,209	28 ↓	21	107
Ford	872 ↓	975	8,471	219 ↓	274	2,283	653 ↓	701	6,188
Mitsubishi	800 ↓	877	7,279	393 ↓	400	3,558	407 ↓	477	3,721
BMW	700 -	700	4,475	700 -	700	4,475	0 -	0	0
Volkswagen	663 ↓	908	4,839	663 ↓	908	4,839	0 -	0	0
Hino	421 ↑	339	3,242	0 -	0	0	421 ↑	339	3,242
Hyundai	400 ↓	485	4,351	363 ↓	440	4,026	37 ↓	45	325
Suzuki	321 ↑	290	2,442	321 ↑	290	2,442	0 -	0	0

Figure 3.2. Sales Record for Passenger Cars for the Month of August 2017 (paultan.org)

3.5.1 Sample Size and Power Analysis

Sample size is the exact number of respondents drawn from the larger population of a research context (Faul, Erdfelder, Lang, & Buchner, 2007). The power statistics test is employed to reduce the cost of sampling error. The power of the statistical test is the analysis that ensures the probability of rejecting the null hypothesis (which proposed no significant relationship between the variables) (Snijders, 2005). Theorists opine that the bigger the sample size, the more important the power of the statistical test (Faul et al., 2007). In the light of this argument, power analysis was conducted in this research to determine the appropriate sample size for this study using G*Power 3.10 software (Faul et al., 2007). The following parameters were keyed into the G*Power software: Power ($1-\beta$ err prob; 0.95); Alpha significance level (α err prob; 0.05); medium effect size f^2 (0.15) and five main predictor variables (i.e., social media advertising, social media sales promotions, social media interactive marketing, social media WOM and automotive CBBE). The result of the power analysis as presented in Figure 3.3 below reveals that a minimum sample of 138 is required to test a regression-based model of this study (Salkind, 2010).

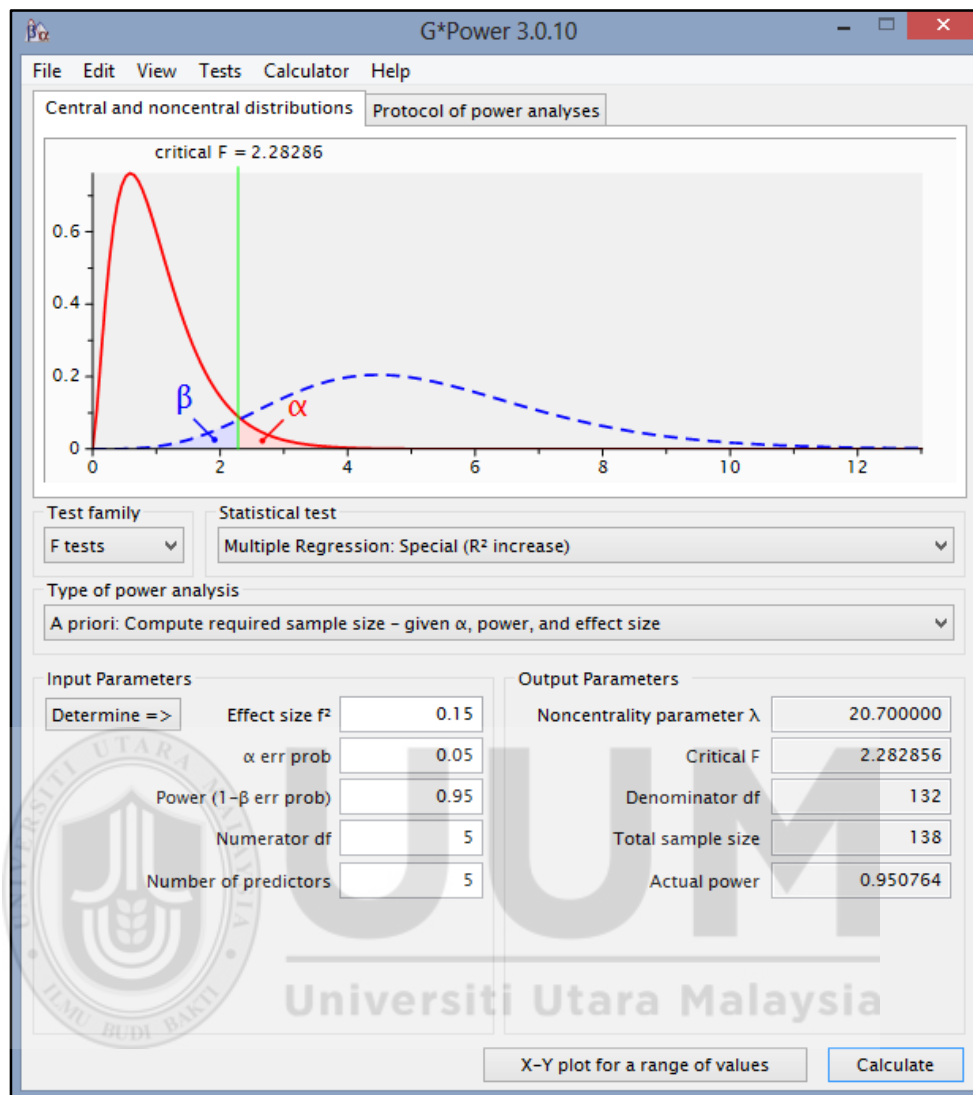


Figure 3.3. The Output of a Priori Power Analysis

The determination of 138 as the minimum required sample size for this study necessitates a further need to ensure larger sample size. In this regard, Salkind (2010) advised that the minimum sample size can be increased to fulfill certain research objectives, especially because it is very uncommon in a survey study to attain a 100% response rate, due to loss of questionnaires and possible uncooperative respondents. Therefore, in order to increase response rate, the researcher considered over-sampling by increasing the sample size with 40% (55) of the minimum sample

size (138) (Salkind, 2010). Therefore, the summation of 40% (55) with the minimum sample size (138) is equal to 193. This means that a sample size of 193 is required for each automotive brand. Subsequently, a sample size of 772 respondents is considered appropriate for this study. Meanwhile, according to Creswell (2007) a high response rate is very important for the purpose of generalizing the study's findings to the population understudied. In order to ensure maximum response rate, the researcher increased the number of respondents to 200 for each selected brand. Therefore, a total number of 800 survey questionnaires were distributed in this study.

3.5.2 Sampling Technique

According to research methodology texts, cluster sampling is appropriate for studying a nation-based population (Cohen, Manion, & Morrison, 2000; Ranjit, 2012). A cluster sampling technique was employed in this study. The cluster sampling technique was employed to separate Malaysia into five regions; North Region, Central Region, Southern Region, East Coast and Borneo Islands. Subsequently, one major city was purposively selected to represent each cluster/region, depending on its cosmopolitan feature. Accordingly, Penang was selected to represent the Northern Region, Kuala Lumpur represented the Central Region in this study, Johor Bahru was selected to represent the Southern Region and Kuantan represented the East Coast while Kuching represented the Borneo Islands. To ensure randomness in the sample selection technique, a random sampling selection technique was employed to determine the number of samples from each of the selected cities. The random sampling procedure recommended by Cohen, Manion and Morrison (2000) was employed in this study. This was done by listing

the 5 cities (Penang, Kuala Lumpur, Johor Bahru, Kuantan and Kuching) on separate sheets of paper, which were then folded and placed in a bowl. The names of the cities were shuffled and picked 800 times. The number of times every city is picked was recorded and was therefore the total number of samples that was drawn from the cities. Table 3.5 presents the number of samples that was drawn from each city across the geographical regions of Malaysia.

Table 3.5
List of Samples across Malaysian States

S/N	Regions	City Selected	Number of Samples
1	North	Penang	233
2	Central	Kuala Lumpur	210
3	South	Johor Bahru	187
4	East	Kuantan	100
5	Borneo	Kuching	70
Total			800

3.5.3 Unit of Analysis

Individual respondents of this study constitute the unit of analysis in this research. According to Babbie (2012), a study of this nature that aims at examining perceptions should focus on individual opinions, hence the examination of the impact of social media marketing communications on automotive CBBE and consumer response is analyzed based on the opinion of individual respondents. This is because perception is considered subjective and can be divergent according to individuals' views and understandings of the subject matter. (Bryman & Bell, 2007) explained that perception can be easily identified and analyzed. Therefore, the individual perception of the respondents serves as the unit of analysis of this research.

3.6 Data Collection Procedure

The survey aspect of this study was conducted using a survey questionnaire. The questionnaire was distributed to users of the selected automotive brands, who were approached at the official service centers of the various automotive brands. The data collection process spanned April 2017 to July 2017. An introduction letter, which introduced the researcher, brief objectives of the research and the minimum time it will take to fill a questionnaire was presented to the owners of service centers. The letter was written on the School of Multimedia Technology and Communication (SMMTC) letter-headed paper, and was signed by the main supervisor of this study. The questionnaires were administered by the researcher expect for Sarawak, which was done with the help of a research assistant (See Appendix F for the Survey Introduction Letter).

The questionnaires were prepared in two language versions; English and Malay. To ensure easy understanding by respondents that are not fluent in English language, a Malay version of the questionnaire was prepared. The English version, which was the original language of the questionnaire, was translated by a professional language translator. Subsequently, two other experts from the Department of Media Management proof-read the Malay version in order to ensure the use of correct and appropriate vocabularies and terminologies (See Appendix G and Appendix J for the survey questionnaires).

Furthermore, the questionnaires were replicated into four different types, following the number of automotive brands that were selected in this study. In other words, 200 questionnaires were prepared and administered for each automotive brand;

PERODUA, PROTON, TOYOTA and HONDA. This was done to ensure clarity and eradicate confusion, and it helped the researcher to identify the questionnaires and the responses of each brand separately.

The average time for filling the questionnaire was 10 to 13 minutes, which is considered to be a long time-period. Therefore, the researcher prepared incentives in the form of customized key chains and customized pens with UUM logos, and they were presented to the respondents as suggested by Neuman (2014). The following section presents the ethical considerations that guided the process of data collection in this study.

3.6.1 Research Ethical Considerations

Research ethics are a set of principles and behaviors that guide the activities of a research. This set of principles are considered in order to ensure the rights of the respondents are not abused (Babbie, 2012; Uma Sekaran, 2012). Impliedly, the researcher must ensure that respondents are not forced to participate in the study. This was ensured in this study through the introductory letters, which clearly informed the respondents about their right to withdraw their participation at any point in time. Overall, this study employed the following five research ethics as the guides to the activities of this research.

1. The researcher ensured the respondents are treated with respect.
2. The researcher ensured the views of the respondents are used for academic purposes alone.

3. The researcher ensured zero potential harm for respondents in the course of participating in this research.
4. Respondents were not forced to participate in this study.
5. Lastly, respondents have the right to access the findings of the research upon their request.

Invariably, these five procedures ensured unbiasedness in the respondents' responses. These ethical procedures also added to the originality of the responses given by the respondents, which subsequently affected the research findings in a positive manner.

3.7 Method of Analysis

The data was collected using questionnaires and analyzed using the combinations of both descriptive and inferential statistics. The descriptive analysis was conducted using SPSS version 22.0 for Windows and the inferential aspect of the statistics was done by employing the Structural Equation Modelling (SEM) technique, using the AMOS software version 23.0. Meanwhile, before diving into the inferential statistics, a few preliminary analyses were conducted, including data screening, missing data assessment and replacement, multicollinearity, homoscedasticity and linearity using SPSS version 22 for Windows. The main purpose of the preliminary analysis was to get the collected data ready and appropriate for inferential statistics. The two major types of data analysis are discussed in details below.

3.7.1 Descriptive Analysis

Descriptive analysis was conducted in this study to describe the data and the respondents (Hair et al., 2010). Descriptive analysis in this study includes the frequency of occurrence, average score, central tendency (mean, median and mode) and the measure of dispersion (range, variance and standard deviation) of the variables understudied in this research.

3.7.2 Structural Equation Modeling Technique

The Structural Equation Modeling (SEM) technique is a very popular multivariate statistical approach for testing existing conceptual theories and developing new theoretical models (Hair et al., 2010). SEM is an analytical technique that allows separate analysis of a set of independent variables on dependent variables. SEM provides the appropriate and most efficient estimation technique for a series of separate multiple regression equations estimated simultaneously. It is characterized by two basic components; the measurement model and the structural model (Byrne, 2010). The measurement model represents the degree to which the indicator (item) variables capture the essence of the latent factor. A valid measurement model is determined by the wellness of its psychometric properties (such as reliability, unidimensionality, convergent validity, discriminant validity and nomological validity) of the measurement of the constructs. These properties are accomplished in this study through Confirmatory Factor Analysis, also known as the development of measurement model (Hair et al., 2010).

The structural model is the path model which is used to establish the causal relationship between the independent variables and the dependent variables based on theory or formulated hypotheses. In connection with this research, the theoretical perspectives of the consumer stimulus-response model and schematic theory were transformed into a hypothesized model of SEM. According to (Hair et al., 2010; Kline, 2010), this is mainly done to frame the model into more formal terms through a series of equations that are useful in specifying research ideas about the relationships among variables. The structural model is the linkage of all unobserved (latent) variables to each other. The structural model is also a set of one or more dependent relationship linkages to the hypothesized model constructs (Hair *et al.*, 2010). In addition, the structural model can be used to represent the interrelationships between the constructs (Byrne, 2010; Hair et al., 2010). The constructs' interrelationships represent the covariance or the correlation between a pair of constructs (Nicosia & Mayer, 1976). In conclusion, the application of SEM technique in this study consists of two major stages; assessment of the measurement model by using confirmatory factor analysis (CFA), and assessment of the structural model.

The measurement model in SEM indicates how measured variables collectively measure the variables they are linked to. Meanwhile, the structural model shows the associations between variables (Hair et al., 2010). The relationship between measured variables and unobserved constructs is identified through the Confirmatory Factor Analysis (CFA). Experts such as; Hair et al. (2010), Byrne (2010) and Kline (2005) highlight the general specifications as follows:

- 1) Each measurement indicator must have a non-zero loading on the construct it measures, but a zero loading on other constructs;
- 2) The error terms are independent of each other and the factor;
- 3) Associations between the indicators are not measured and
- 4) One of the loading paths that are hypothesized to measure a construct must be constrained to have a value of 1.00 for the purpose of model identification.

According to Bryne (2010), there are three main strengths of SEM over other forms of multivariate analysis such as the multiple regression in SPSS. The first is that SEM is embedded with statistical techniques that can estimate two structures - the measurement model and the structural model - in one structure. The second is that SEM has the ability to assess measurement errors in the explanatory variables which can prevent different types of inaccuracies. Finally, analyzing with SEM allows the incorporation of both unobserved (latent) and observed variables, as against other forms of multivariate analyses, which are based on observed variables only.

Using SEM as a means of analysis in this study is relevant because according to Shook, Ketchen, Hult and Kacmar (2004), the use of SEM is pertinent when 'strong theoretical underpinnings are critical to causality inferences' (p.398) in a non-experimental research. In the case of this research, the theoretical framework is implicitly guided by the CSRM, which explained that marketing communications such as social media advertising, social media promotions, social interactive marketing and social media word-of-mouth are sets of market stimuli. These forms

of market stimuli, which are capable of instigating positive and favorable evaluations and perceptions of brands in the minds of consumers, will consequently evoke certain responses which can be in the form of purchase decision and preference (Nicosia & Mayer, 1976). In other words, testing the proposed theoretical framework with SEM is expected to yield an empirical credence to the proponents of CSRM.

In specifics, the Analysis of a Moment Structures (AMOS) software version 23.0 is used in this study to calculate the validity of the measurement models and to examine the goodness of fit of the measurement models, they are evaluated through other multiple fit indicators which are categorized into absolute, incremental and parsimonious fit levels as recommended by Hair *et al.*, (2010). In specifics, this study reports the overall model Root Mean Square Error of Approximation (RMSEA), Goodness-of-fit statistic (GFI), Adjusted goodness-of-fit statistic (AGFI), Normed-fit index (NFI), Tucker-Lewis Index (TIL) or Non-Norm Fit Index (NNFI), Comparative fit index (CFI), Incremental fit index (IFI) and Relative chi-square (CMIN/DF or χ^2/df). Relative RMSEA less than .08 and NFI greater than .90 were taken as acceptable threshold levels (Byrne, 2010). Meanwhile, GFI greater than .80 (Byrne, 2010) and AGFI greater than .80 were taken as acceptable threshold levels (Byrne, 2010; Hair et al., 2010). Additionally, TIL or NNFI greater than .90 and CFI greater than .90 were taken as acceptable threshold levels (Hair et al., 2010). Furthermore, IFI greater than .90 was taken as an acceptable threshold level (Hu & Bentler, 1999), CMIN/DF or χ^2/df less than .5 and PNFI >0.60 were taken as acceptable threshold levels (Hair et al., 2010). Table 3.5 presents the summary of threshold values used in this study to ensure goodness of fit.

Table 3.6
Indices for Evaluating Goodness of Fit

Goodness of Fit Statistics	Threshold values
Absolute Fit Level	
CMIN/df	<5
RMSEA	<0.08
GFI	>0.8
AGFI	>0.8
Incremental Fit Level	
CFI	>0.9
TLI	>0.9
NFI	>0.9
IFI	>0.9
Parsimonious Fit Level	
PNFI	>0.6

Subsequently, the standardized estimates of structural model consisting of the coefficients of the path analysis, t-values and p-values is reported to analysis the direct hypotheses in this study (H1 to H9). Additionally, to test for the indirect effect of CBBE on the relationships between social media marketing communications and consumer response, a bootstrap of 2,000 samples was performed with a 95% bias-corrected confidence intervals. This study follows the approach of Preaches and Hayes (2008) who suggested that performing mediation with the bootstrapping technique can determine the mediating variable's effect in a structural model. According to Zhao et al., (2010) there are five benchmarks available for the assessment of mediation effects, three of these benchmarks are consistent with mediation effects and the two other explain the situation of non-mediation, as listed below:

- 1- Complementary mediation: this exists when mediation occurs significantly at both direct and indirect effects.

- 2- Competition mediation: mediation occurs as if both paths are significant then can be close to zero, meaning at opposite direction.
- 3- Indirect-only mediation: this exists only on the indirect effect.
- 4- Direct- only non-mediation: this exists on the direct effect.
- 5- No-effect on mediation: this exists when there is no direct or indirect effect.

Therefore, the typology of Zhao et al. (2010) is employed for the interpretation of the results in relations to H10, H11, H12 and H13 in this study.

3.8 Summary of the Chapter

This chapter explained the succinct procedure and justifications for the methodology employed in achieving the research objectives and answering the outlined research questions of this study. This chapter also presented the six stages of item validation and purification in this study. Since the method and the techniques are all known and defined, the researcher followed these procedures to the completion of the research. This chapter also discussed the sampling procedures, sample size, data collection process and techniques. Furthermore, this chapter also featured discussions on how the data analysis was done and justifications for each and every step presented.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.0 Introduction

This chapter presents the procedure of data analysis, results and findings of this study. SPSS was used for the initial data cleaning, checking for statistical assumptions and conducting descriptive statistics. Subsequently, AMOS software was used for assessing the goodness of measures through confirmatory factor analysis (CFA) and the internal consistency procedures of reliability analysis, correlation estimates and validity tests. Furthermore, SEM was used to test the formulated hypotheses, and the findings were presented and summarized. Specifically, Section 4.1 presents the result of the pilot study. Section 4.2 presents the response rate, followed by Section 4.3, where the preliminary data screening stages were elucidated. Section 4.4 presents demographic information and Section 4.5 the descriptive statistics for describing the data. Section 4.6 presents the results of SEM and finally, Section 4.8 reveals the summary of the findings.

4.1 Pilot Study

As stipulated in the developmental stages (See Figure 3.1 in chapter three), pilot study is the sixth stage of the sequence. In the course of pretesting the scale proposed in this study before conducting the main survey, data was collected among staff and postgraduate students at the Universiti Utara Malaysia (UUM). Respondents were users of social media, fans, followers or subscribers of one, some or all social media pages of any automotive brand on Facebook, Twitter, YouTube or Instagram (See

Table 4.1). A self-administered questionnaire was distributed to 200 respondents in the month of April 2017. The questionnaire was translated to Melayu language and both English and Melayu versions were distributed, depending on the requests of the respondents.

Out of the 200 distributed questionnaires, 162 were returned and 11 were found usable. Three (3) questionnaires were found unusable because the respondents left more than 50% of the questions of the questionnaire unanswered. The remaining nine (9) were excluded because the researcher discovered that the respondents were not qualified for the study, either because the respondents were not following any automotive brand on their social media or the respondents were not using social media at all. Table 4.1 presents the demographic and basic information of the respondents. Subsequently, the researcher proceeded with an Exploratory Factor Analysis and Reliability Test as presented in the following sections, which resulted in the finalized versions of the questionnaire presented in Appendix G.

Table 4.1
Demographic and Basic Information of Pilot Study Sample

No	Questions	Options	Frequency	Percentage (%)
1	Gender	Male	71	47.0
		Female	79	52.3
		Total	150	99.3
2	Age	Less than 25 years	52	34.4
		26 to 35 years	65	43.0
		36 to 45 years	23	15.2
		45 years and Above	10	6.6
		Total	150	99.3
3	Highest Level of Education	Diploma	32	21.2
		Bachelor's Degree	34	22.5
		Master's Degree	53	35.1

Table 4.1 Continued

		PhD	22	14.6	
		Others	8	5.3	
		Total	149	98.7	
4	Ethnicity	Melayu	91	60.3	
		Chinese	31	20.5	
		Indian	26	17.2	
		Others	3	2.0	
		Total	151	100.0	
5	Social Media Frequently Used	Facebook	127	84.1	
		Twitter	31	20.5	
		YouTube	80	53.0	
		Instagram	62	41.1	
6	Fan of Automotive Brands on Social Media	Yes	151	100.0	
7	Following Automotive Brands on Social Media	Facebook	127	84.1	
		Twitter	30	19.9	
		YouTube	41	27.2	
		Instagram	41	27.2	
8	Automotive Brands Followed on Social Media	Proton	61	40.4	
		Perodua	54	35.8	
		Toyota	42	27.8	
		Nissan	23	15.2	
		Honda	51	33.8	
9	Types of Social Media Marketing Communications you ever Seen	Advertisement	123	81.5	
		Promotions	85	56.3	
		Interactive Marketing	46	30.5	
		Social Media Word-of-Mouth	45	29.8	
10	Favorite Brands	Automotive	Honda	47	31.1
			Toyota	27	17.9
			Proton	16	10.6
			Mercedes	6	4.0
			Nissan	8	5.3
			Range Rover	3	2.0
			Hyundai	4	2.6
			Perodua	17	11.3
			Suzuki	4	2.6
			BMW	14	9.3

4.1.1 Exploratory Factor Analysis

Experts have affirmed that conducting factor analysis is considered necessary to ensure the validity of factors that contribute differentially to the causal explanation of variance in the understudied variables (Hair, Black, Babin, Anderson, & Tatham, 2010). Following this suggestion, this study used SPSS version 22.0 for Windows to perform the exploratory factor analysis. This procedure allowed the data to statistically load on factors that are related in any initial or priori assumptions that guided the development of the scale (Field, 2009). The result of item-item total correlations in reliability analysis revealed that all inter-item correlations were greater than 0.3, which confirmed the appropriateness of the application of factor analysis to the data matrix (Hair et al., 2010). A 151 sample size can be considered appropriate for conducting factor analysis. According to Pallant (2013), there are two prerequisite issues that are considered important when conducting a factor analysis. The first is the sample size, which has been argued to be more than 150 before considering a factor analysis, and the second is the inter-correlation between the items before considering a factor analysis. Therefore, a sample size of 151 can be considered adequate for factor analysis.

With regards to the inter-correlations between items, Pallant (2013) added that this can be ensured using both the Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. According to Hair et al. (2010), a KMO value of 0.90 is marvelous, 0.80 is meritorious, 0.70 is middling, 0.60 is mediocre; 0.50 is acceptable but miserable; and below 0.50 is unacceptable. Hair et al., (2010) suggested that KMO values must exceed 0.50 to be deemed fit for factor

analysis, otherwise, the researcher would either need to collect more data and/or include more variables (Kaiser, 1974). In addition, the result of Bartlett's test of sphericity must be significant ($p < 0.05$) before proceeding with factor analysis.

After confirming the necessary criteria for conducting factor analysis, a Principal Component Analysis (PCA) with an orthogonal rotation using Varimax in SPSS was performed. According to the rule of thumb by Hair et al. (2010), the factor loadings should have values greater than 0.50. Therefore, items exhibiting low factor loadings (< 0.50), high cross loadings (> 0.40) and low communalities (< 0.30) were candidates for elimination (Hair et al., 2010). The following sections present the result of EFA for the Automotive CBBE, Social Media Marketing Communications and Consumer Response scales.

4.1.1.1 Exploratory Factor Analysis of Consumer-Based Brand Equity for Automotive Brands

Applying the latent root criterion, only the factors that accounted for the variance of at least a single variable were considered for retention (Hair et al., 2010). The 69 items that represent all the constructs were factor analyzed with unspecified eigenvalue. This resulted in the extraction of four factors with eigenvalue greater than 1, accounting for 59% of the total variance extracted. This implied that the four distinct factors reflecting the four dimensions of Automotive CBBE were all significant. It is important to note that the first few factors usually explain a larger percentage of variances that are recorded in a study (Hair et al., 2010). Therefore, factor 1 explains 41.98% of the total variance in the analyzed data set. The result of

the eigenvalue extracted and the percentage of variance explained are presented in Table 4.2.

Table 4.3 presents the results of factor analysis for Automotive CBBE. For determining the adequacy of sample size, the KMO and Bartlett tests were first applied. The results in Table 4.3 indicate that the KMO value for the Automotive CBBE is 0.921, indicating a meritorious level (Hair *et al.*, 2010), and thus factor analysis was deemed to be appropriate for this data. Furthermore, the output of Bartlett's test in this study can be represented with the following equation ($\chi^2 = 7196.693$; $DF = 1378$; $P < 0.05$), which confirms the existence of some relationship between the dimensions of Automotive CBBE ; Brand Awareness, Hedonic Brand Image, Functional Brand Image and Brand Sustainability.

After confirming the necessary criteria for conducting factor analysis, a Principal Component Analysis (PCA) with Vimax rotation was performed on the Automotive CBBE variable. Applying the latent root criterion, only the factors that accounted for the variance of at least a single variable were considered for retention (Hair *et al.*, 2010). From all the 69 items that measured the Automotive CBBE variable, a total of 53 items had a factor loading above 0.50 as presented in Table 4.3. Thus, a total of 16 items were deleted from the Automotive CBBE items. Specifically, one (1) item (CBBEBA9) was deleted from brand awareness, 8 items (CBBEHBI2, CBBEHBI4, CBBEHBI5, CBBEHBI6, CBBEHBI9, CBBEHBI15, CBBEHBI16, CBBEHBI17) were deleted from hedonic brand image. Furthermore, five (5) items (CBBEFBI13, CBBEFBI23, CBBEFBI26, CBBEFBI29 and

CBBEFBI30) and finally, one (1) item (CBBEBS10) were deleted from brand sustainability.

Table 4.2

Eigenvalue extracted and total variance explained for the four dimensions

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	22.9	43.3	43.3	22.9	43.3	43.3	14.6	27.6	27.6
2	3.7	7.0	50.4	3.7	7.0	50.4	6.7	12.7	40.4
3	3.1	5.9	56.4	3.1	5.9	56.4	6.3	11.8	52.3
4	1.9	3.6	60.0	1.9	3.6	60.0	4.1	7.7	60.0

Extraction Method: Principal Component Analysis.

Table 4.3

EFA for Automotive CBBE

Items	Component			
	BA	HBI	FBI	BS
CBBEBA1	.838			
CBBEBA2	.818			
CBBEBA3	.879			
CBBEBA4	.742			
CBBEBA5	.771			
CBBEBA6	.691			
CBBEBA7	.754			
CBBEBA8	.562			
CBBEHBI1		.584		
CBBEHBI3		.630		
CBBEHBI7		.817		
CBBEHBI8		.611		
CBBEHBI10		.608		
CBBEHBI11		.548		
CBBEHBI12		.584		
CBBEHBI13		.630		
CBBEHBI14		.817		
CBBEFBI1			.702	
CBBEFBI2			.756	
CBBEFBI3			.748	
CBBEFBI4			.783	

Table 4.3 Continued

CBBEFBI5	.767
CBBEFBI6	.685
CBBEFBI7	.703
CBBEFBI8	.718
CBBEFBI9	.791
CBBEFBI10	.762
CBBEFBI11	.666
CBBEFBI12	.573
CBBEFBI14	.639
CBBEFBI15	.653
CBBEFBI16	.564
CBBEFBI17	.651
CBBEFBI18	.557
CBBEFBI19	.626
CBBEFBI20	.641
CBBEFBI21	.647
CBBEFBI22	.670
CBBEFBI24	.545
CBBEFBI25	.626
CBBEFBI27	.611
CBBEFBI28	.662
CBBEFBI31	.558
CBBEFBI32	.578
CBBEBS1	.698
CBBEBS2	.697
CBBEBS3	.649
CBBEBS4	.702
CBBEBS5	.691
CBBEBS6	.749
CBBEBS7	.812
CBBEBS8	.767
CBBEBS9	.641

BA (Brand Awareness), HBI (Hedonic Brand Image), FBI (Functional Brand Image), BS (Brand Sustainability). Source: Designed for this study

4.1.1.2 Exploratory Factor Analysis for Social Media Marketing Communications

This section presents the result of EFA for social media marketing communications. Table 4.4 reveals the result of extraction of four factors with eigenvalue greater than 1, accounting for 60% of the total variance extracted. This implies that the four distinct factors reflecting the four dimensions of Social Media Marketing Communications are all significant. The factor 1 explains 37.66% of the total variance in the analyzed data set. For determining the adequacy of sample size, the KMO and Bartlett tests were first applied. The results presented in Appendix 3.8 indicated that the KMO value for the Social Media Marketing Communications is 0.881, indicating a meritorious level (Hair *et al.*, 2010), and thus factor analysis was deemed to be appropriate for this data. Furthermore, the output of Bartlett's test in this study can be represented with following equation ($\chi^2 = 2532.674$; DF= 378; $P < 0.05$), which confirms the existence of some relationship between the dimensions of social media marketing communications; Social media advertising, Social media promotions, Social media interactive marketing and Social media word-of-mouth. Furthermore, Table 4.4 presents the results of factor analysis for Social Media Marketing Communications.

After confirming the necessary criteria for conducting factor analysis, a Principal Component Analysis (PCA) with Varimax rotation was performed on the Social Media Marketing Communications variable. Applying the latent root criterion, only the factors that accounted for the variance of at least a single variable were considered for retention (Hair *et al.*, 2010). From the 34 items that measured the

social media marketing communications variable, a total of 28 items have a factor loading above 0.50 as presented in Table 4.5. Thus, 6 items were deleted from the measures of social media marketing communications. Specifically, one (1) item (SMP9) was deleted from social media promotion. Three (3) items (SMIM1, SMIM3 and SMIM8) were deleted from social media interactive marketing. Finally, two (2) items (SMWOM1 and SMWOM9) were deleted from social media word-of-mouth.

Table 4.4

EFA for Social Media Marketing Communications

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.5	37.6	37.6	10.5	37.6	37.6	4.5	16.4	16.4
2	2.6	9.3	46.9	2.6	9.3	46.9	4.5	16.0	32.4
3	2.0	7.2	54.2	2.0	7.2	54.2	4.3	15.5	47.9
4	1.7	6.3	60.6	1.7	6.3	60.6	3.5	12.6	60.6

Extraction Method: Principal Component Analysis.

Table 4.5

Factor Loadings for Social Media Marketing Communications

Items	Components			
	SMA	SMP	SMIM	SMWOM
SMA1	.636			
SMA2	.739			
SMA3	.693			
SMA4	.759			
SMA5	.611			
SMA6	.643			
SMA7	.646			
SMA8	.679			
SMP1		.761		
SMP2		.783		
SMP3		.679		
SMP4		.577		
SMP5		.629		

Table 4.5 Continued

SMP6	.684	
SMP7	.689	
SMP8	.535	
SMIM3		.799
SMIM4		.667
SMIM5		.718
SMIM6		.774
SMIM7		.657
SMWOM2		.748
SMWOM3		.765
SMWOM4		.768
SMWOM5		.788
SMWOM6		.663
SMWOM7		.677
SMWOM8		.632

SMA (Social Media Advertising), SMP (Social Media Promotion), SMIM (Social Media Interactive Marketing), SMWOM (Social Media Word-of-Mouth).

4.1.1.3 Exploratory Factor Analysis for Consumer Response

The result of the EFA presented revealed the result of extraction of one factor with eigenvalue greater than one (1), accounting for 55% of the total variance extracted. This implies that there is only one distinctive factor explaining the variance in the Consumer Response variable. Hence, the measures of purchase intention and brand preference were loaded under one construct. For determining the adequacy of sample size, the result of the KMO and Bartlett indicated that the KMO value for Consumer Response is 0.811, indicating a meritorious level (Hair *et al.*, 2010), and thus factor analysis was deemed to be appropriate for this data. Furthermore, the output of Bartlett's test in this study can be represented with the following equation ($\chi^2 = 490.865$; $DF = 21$; $P < 0.05$), which confirms the existence of some relationship between the items of the variable. Table 4.6 presents the results of factor analysis for

Consumer Response, showing all the seven (7) items rotated with loading higher than 0.50, thus no item was deleted under this variable.

Table 4.6
Factor Loadings for Consumer Response

Items	Loadings
CRPI1	.702
Table 4.6 Continued	
CRPI2	.713
CRPI3	.701
CRBP1	.807
CRBP2	.853
CRBP3	.693
CRBP4	.741

4.1.2 Reliability Test

Subsequently, the reliability of the scales developed in this research were examined using Cronbach's alpha (Sekaran & Bougie, 2013). Cronbach's alpha was used to determine the internal consistency of the items of the scales. It was also used to eliminate items with low item-total correlations (< 0.3). The acceptable value of Cronbach's alpha in this study is 0.70, according to the argument proffered by Hair, Black, Babin, Anderson and Tatham (2010). Following these procedures, no item was deleted from the scales of Automotive CBBE, Social Media Marketing Communications and Consumer Responses. The results presented in Table 4.7 show that the Cronbach's alpha values for the scales developed in this study are acceptable. All the Cronbach's alphas obtained in this study are all acceptable, indicating internal consistency among the items of the developed scale. Appendix G

presents the final scales ready to be distributed for the main survey. The following section presents the analysis of the main survey.

Table 4.7
Summary of Reliability Tests

Constructs	Number of Items	Cronbach's Alpha	Number of Items Dropped	Number of Items for Main Survey
Automotive Consumer-Based Brand Equity	53	.973	16	53
Social Media Advertising	8	.887	None	8
Social Media Promotions	9	.880	None	8
Social Media Interactive Marketing	8	.850	3	5
Social Media Word of Mouth	9	.895	2	7
Consumer Response	7	.861	None	7

4.2 Response Rate

For the purpose of this study, a total of 800 questionnaires were distributed to users of four automotive brands across five cities in the five regions of Malaysia. In order to achieve a high response rate, the researcher employed a rigorous administration procedure (Sudman, 1996). Therefore, towards the aim of achieving a high response rate in this study, the researcher distributed majority of the questionnaires himself in four of the five cities other than Kuching, the distribution of which was conducted by a research assistant. The research assistant was instructed on how to distribute the questionnaires.

Subsequently, out of the 800 questionnaires distributed, 710 questionnaires were returned and 615 questionnaires were finally considered valid for analysis. The

researcher sorted the returned questionnaires based on a question (On which of the following social media platforms do you follow Brand X?) that was set to screen respondents who are not followers of any of PROTON, PERODUA, TOYOTA and HONDA on social media platforms from the study. This was done to ensure that the respondents in this study are those that have actually seen/read/watched any form of FCCs on social media and have commented/posted/liked UGC on social media platforms. Subsequently, 95 questionnaires were eliminated from the 710 returned questionnaires, leaving the remaining valid questionnaires to be 615 in number.

Furthermore, 71 questionnaires were excluded from the study during the process of data cleansing and preliminary exploratory analysis. This subsequently resulted into 544 valid and usable questionnaires. Hence, this study has a valid 68% response rate, representing 544 out of 800 distributed questionnaires. Following the argument proffered by Creswell (2012) that a response rate of 50% or above is adequate for surveys, the analysis of this study was based on 544 respondents, representing 68% response rate, which is considered acceptable. The following sections present the process of exploring and screening the collected data.

4.3 Preliminary Data Screening

This section presents the preliminary data analysis which involves the screening and cleansing of the data and making the data ready for inferential statistical analysis. The preliminary analysis and data screening is done with SPSS version 22. The data screening involves several procedures as suggested by Hair et al., (2010). This includes testing of non-response bias, assessing and replacing missing values,

assessing and treating outliers, testing normality, linearity test, homoscedasticity test and multicollinearity test (Hair et al., 2010). These series of tests and processes are reported in the following sections.

4.3.1 Assessing and Replacing Missing Values

The first step in the preliminary analysis was to assess missing values. The initial data keyed into SPSS contained 50,430 data points. Using the descriptive statistics, 21 random missing data were discovered, representing 0.04%. Brand awareness, Hedonic brand image, Brand sustainability, Social media word-of-mouth and Consumer response have two missing values respectively. Meanwhile, Functional brand image has one missing value and Social media advertising has ten missing values. The result revealed that the entire 21 missing values were replaced with series mean as suggested by Hair et al., (2010). The descriptive results of the replaced missing values. These results indicate that the data used in this study is free from missing values. The following section presents the result of assessing non-response bias.

4.3.2 Test of Non-Response Bias

To examine the absence of response bias in the data collected for this study, an Independent Sample T-Test was conducted to assess the non-response bias. This was done by comparing the responses of the respondents based on gender (male and female). Thus, the responses between 252 males and 292 females were compared to test for lack of homogeneity of the data. The results presented in Table 4.8 confirmed that the variances of mean between males' and females' responses are homogeneous

($p>0.05$). The findings also show that the equality of the mean values for all the variables of the study have no significant differences between the male and female respondents ($p>0.01$). The results therefore indicate the absence of response-bias, which implies that the data is applicable for further analysis. The following section presents the result of the outlier assessment.

Table 4.8

Results for Independent-Samples T-test for Non-Response Bias

Variables	Gender	N	Mean	Std. Deviation	Levene's Test for Equality of Variances		t-test for Equality of Means		
					F	Sig.	t	df	Sig. (2-tailed)
CBBE	Male	252	3.9786	.48424	.014	.906	.461	535.792	.645
	Female	292	3.9258	.48110			1.273	542	.203
SMA	Male	252	3.8303	.58169	.863	.353	1.273	529.409	.204
	Female	292	3.7394	.62834			1.740	542	.082
SMP	Male	252	3.6414	.64208	.293	.589	1.750	539.319	.081
	Female	292	3.6062	.63878			.639	542	.523
SMIM	Male	252	3.8484	.60387	.645	.422	.639	529.623	.523
	Female	292	3.8247	.59385			.462	542	.645
SMWOM	Male	252	3.7725	.59419	.022	.883	.461	527.736	.645
	Female	292	3.7846	.61333			-.232	542	.817
CR	Male	252	3.5266	.84790	.819	.366	-.233	534.796	.816
	Female	292	3.4211	.81618			1.477	542	.140

Automotive Consumer-Based Brand Equity (CBBE), Social Media Advertising (SMA), Social Media Promotion (SMP), Social Media Interactive Marketing (SMIM), Social Media Word-of-Mouth (SMWOM), Consumer Response (CR).

4.3.3 Detection and Treatment of Outliers

This section presents the three processes undertaken for detecting and treating outliers in this study. Following the suggestions proffered by Hair et al (2010), outliers can be detected at the univariate, bivariate and multivariate levels. In this study, outliers were detected at the three levels mentioned above. At the univariate level, outliers were detected through the calculation of standardized scores (Zscores) and ensuring that the Zscores were below ± 3.0 , because of the large sample size employed in this study. At the bivariate level, outliers were determined by inspecting

the boxplot graph, using the exploratory descriptive method in SPSS. Finally, Mahalanobis distance (D^2) was calculated to detect outliers at the multivariate level. The Mahalanobis D^2 is divided by the total number of variables in the study, hence the degree of freedom (D^2/df). Hair et al (2010) explained that for a study with larger sample size, the acceptable D^2/df is three (3) or four (4). Therefore, any value exceeding three (3) are outliers and will be deleted from this study.

At the univariate level, the result of the standardized scores revealed that 24 cases have Z scores higher than ± 3 as presented in Table 4.2. These cases were subsequently deleted from the study, following the suggestion proffered by Hair et al., (2010). Furthermore, the visual inspection of the boxplot graph was used to detect outliers at the bivariate level. The initial boxplot generated 27 outliers in the data set, although Hair et al., (2010) argued that outliers should not be deleted except they are confirmed aberrant and detrimental to the study analysis.

However, Pallant (2013) contended that insignificant outliers can be included in the research. This study had taken both the former and the latter arguments into consideration. Therefore, the outliers that occurred repeatedly under two or more variables were considered critical and were deleted. A total number of 27 outliers were deleted from the data set, and a few other insignificant outliers were left undeleted at this stage. Subsequently, Figure 4.1 presents a neat boxplot representing and describing the dataset with fewer outliers at the bivariate level.

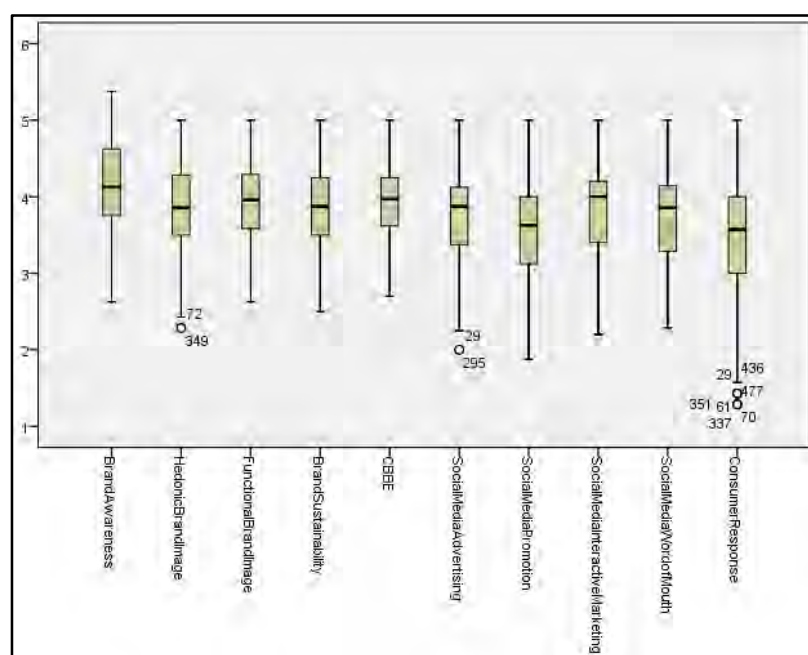


Figure 4.1. Boxplot Graph for Assessing Univariate Outliers

Finally, at the multivariate level, outliers were detected by calculating D^2/df . The result revealed 20 cases with D^2/df values higher than three (3). The entire 20 cases are presented in Table 4.9. Subsequently, a total of 71 outliers were deleted from the dataset, making the subsequent number of valid respondents in this study to be 544. Hence, the data used in this study is free from outliers. The following section presents the result of assessment of normality.

Table 4.9

Cases of Outliers at both Univariate and Multivariate Levels

Cases of Outliers of Univariate Level		Cases of Outliers at Multivariate Level		
Variables	No Cases	Cases	D^2	D^2/df
BA	87, 99, 314, 572, 602	32	18.46	3.08
HBI	610 , 374, 314	33	37.01	6.17
FBI	314, 374 , 610	56	18.90	3.15
BS	519	69	21.62	3.60
CBEE	374 , 610	79	19.32	3.22
SMA	607	92	21.35	3.56
SMP	474 , 79 , 56	116	23.33	3.89
SMIM	33 , 79 , 240 , 607	128	18.40	3.07
SWOM	79 , 607	149	23.02	3.84

Table 4.9 Continued

CR	Nil	240	30.26	5.04
		321	18.53	3.09
		474	21.85	3.64
		483	18.14	3.02
		520	18.42	3.07
		580	31.55	5.26
		599	21.85	3.64
		600	20.51	3.42
		605	44.46	7.41
		607	36.91	6.15
		608	39.38	6.56

4.3.4 Testing Normality

In this study, the normality of the data was examined by assessing the skewness and kurtosis of the data. According to Hair et al. (2010), there are various acceptable values of skewness and kurtosis. However ± 2 is the acceptable value for both skewness and kurtosis. Subsequently, Table 4.10 shows the values of skewness and kurtosis of the measured variables. The results revealed that the values of skewness and kurtosis range from 0.030 and -0.159 to -0.290 and -0.704 respectively. These values indicate that the data collected in this study has not violated the assumption of normality. The following section reveals the results of homoscedasticity.

Table 4.10
Skewness and Kurtosis Values for Measured Variables

Variables	Mean	Std.	Skewness		Kurtosis	
	Statistic	Deviation Statistic	Statistic	Std. Error	Statistic	Std. Error
Brand Awareness	4.1277	.59397	-.286	.105	-.704	.209
Hedonic Brand Image	3.8883	.58879	-.066	.105	-.385	.209
Functional Brand Image	3.9302	.53741	.031	.105	-.353	.209

Table 4.10 Continued

Brand Sustainability	3.8871	.59062	.030	.105	-.540	.209
CBBE	3.9503	.48284	.139	.105	-.351	.209
Social Media Advertising	3.7815	.60832	-.030	.105	-.159	.209
Social Media Promotion	3.6225	.63996	.067	.105	-.388	.209
Social Media Interactive Marketing	3.8357	.59808	-.132	.105	-.214	.209
Social Media Word-of-Mouth	3.7790	.60401	-.071	.105	-.409	.209
Consumer Response	3.4700	.83193	-.290	.105	-.323	.209

4.3.5 Homoscedasticity

Homoscedasticity was tested using both graphical and statistical methods in this study. Graphically, the scatter plot is visually explored to determine if the data scatter randomly across the horizontal axis of the plot. If so, this will be interpreted as thus; the data is heteroscedastic and not homoscedastic. Figure 4.2 below shows the scatter plot, which reveals that the data scatter across the horizontal axis and thus, the data collected for this study is heteroscedastic.

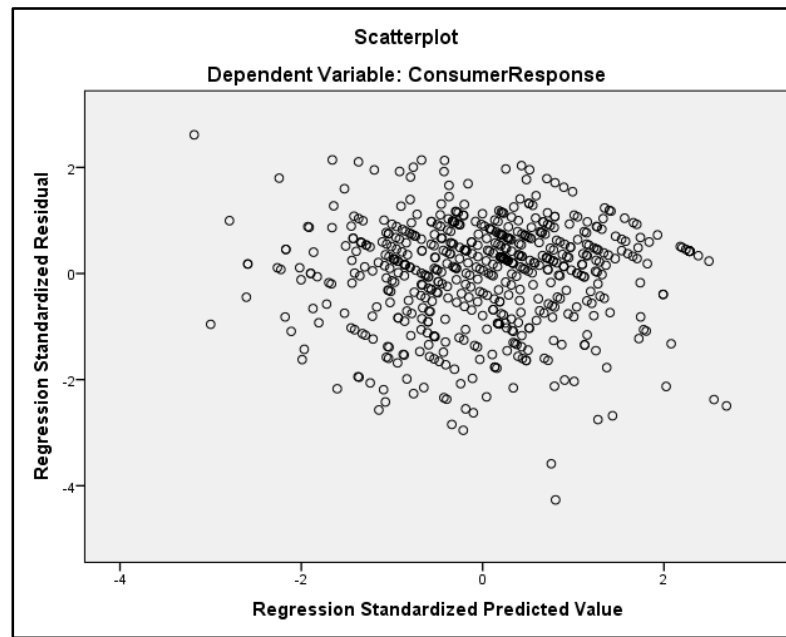


Figure 4.2. Scatter Plot for Assessing Homoscedasticity

Furthermore, to confirm this assumption, a Levene test was conducted through independent sample t-test in SPSS. The data was compared across the gender of the respondents to determine the homogeneity in the data. Hence, any item with significant value below 0.05 were considered homoscedastic ($p < 0.05$). The result presented in Levene Test shows that a total of 10 items (CBBEBA4, CBBEHBI5, CBBEHBI7, CBBEFBI1, CBBEFBI2, CBBEFBI9, CBBEFBI12, CBBEFBI12, CBBEFBI17, SMA5 and CR7) have significant vales below 0.05. Thus, these items were homoscedastic. However, the researcher resolved not to delete these items from the study following the observation of Field (2009), who argued that Levene test is sensitive to big data, such as the case of this study, hence a significant value might not really indicate a significant departure from normality of data.

4.3.6 Assessment of Linearity

The assessment of linearity is also conducted in this study graphical assessment. Figure 4.3 presents the normal P-P plot which depicts the correlation line between the variables understudied (Field, 2009; Hair et al., 2010). The figure reveals a relatively straight line with little deviation which indicates a decent linearity between the variables.

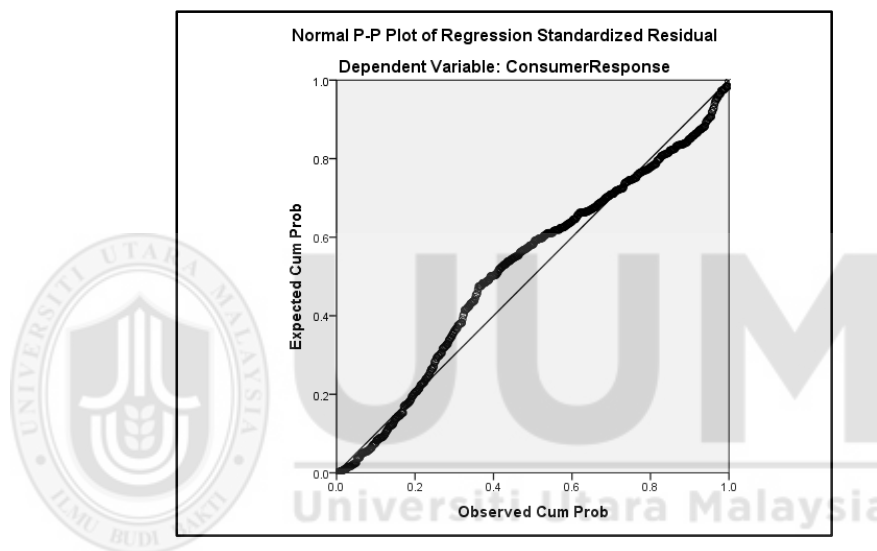


Figure 4.3. Normal P-P Plot for Assessment of Linearity

4.3.7 Assessment of Multicollinearity

Multicollinearity is identified by assessing the correlation matrix higher than 0.80. Table 4.11 reveals the correlation matrix between the variables in this study which are all below 0.80. In summary, the results of the above statistical assumptions evinced that, the data obtained for this study meets the requirement for multivariate analysis and thus ready for structural equation modeling. The following sections present the results of descriptive statistics.

Table 4.11
Pearson Correlation Matrix

Variables	1	2	3	4	5	6
CBBE	1					
Social Media Advertising	.686**	1				
Social Media Promotion	.614**	.704**	1			
Social Media Interactive Marketing	.556**	.674**	.659**	1		
Social Media Word-of-Mouth	.604**	.672**	.661**	.639**	1	
Consumer Response	.595**	.538**	.521**	.401**	.557**	1

** . Correlation is significant at the 0.01 level (2-tailed).

4.4 Demographic Information of the Respondents

This section presents the demographic information of the respondents, together with the basic information that were required to understand the respondents of the study. The demographic information includes the gender, age, highest level of education and ethnicity of the respondents. Meanwhile, the basic information with regards to assessing the relevance of the respondents in this study includes the automotive brands they represent, the platform on which respondents follow their preferred automotive brands and the type of marketing communications they have ever seen, watched or liked on social media.

The descriptive information of the respondents presented in Table 4.12 shows that the majority of the respondents in this study are female, representing 292 (53.7%). Meanwhile, there are 252(46.3%) male respondents. However, there is no major difference between the number of males and females. This result is indicative of the population of Malaysia, which shows no major disparity between males and females.

With regards to the age of the respondents, Table 4.12 shows that majority of the respondents are less than 25 years in age, representing 269(49.4%) of all the respondents. This is followed by 188(34.6%) respondents, who are between the ages of 26 and 35. Finally, 58(10.7%) respondents are between the ages of 36 and 45. This distribution may be a reflection of the fact that young adults are more of the followers of brands on social media in Malaysia than old people.

Table 4.12 also shows that 252(46.3%) respondents, who are the majority, have Bachelor's Degree as their highest level of education. This is followed by 142(26.1%) respondents, who have Masters' degrees. 81(14.9%) respondents have diploma certificates. 62(11.4%) respondents have PhD degrees and only 4(0.7%) respondents are categorized as "others". The category of others includes respondents with high school certificates. The results may be an indication of the fact that there are more young people in this research than elderly people. Hence, the reason majority of the respondents have above Bachelor's degree certification.

Finally under demographic details of the respondents, Table 4.12 depicts the distribution of ethnicity among the respondents in this study. It reveals that 321(59%) respondents are Malay. This is followed by 105(19.3%) respondents who are Chinese. 71(13.1%) respondents are Indians. Meanwhile, 47(8.6%) respondents are grouped under "others", which include other Malaysian ethnic groups. This distribution indicates that there are more Malays in the response distribution than other ethnic groups, an experience similar to other survey studies such as; Norsiah, Mohd Subhi and Norhafezah (2016) in Malaysia.

In order to confirm that the respondents are truly followers of automotive brands on social media platforms, Table 4.12 presents the distribution of the types of social media platforms on which respondents follow their preferred automotive brands. Majority of the respondents, representing 88.7% followed an automotive brand on *Facebook*, followed by 40% of the respondents who declared that they have seen, read, watched or commented on the marketing communications of an automotive brand on *YouTube* (40.8%), *Instagram* (30.7%) and *Twitter* (16.2%). This result indicates that *Facebook* is the most predominant social media platform among the listed platforms.

Table 4.12 also shows the types of marketing communications that the respondents have seen, read or watched on social media, ranging in descending order from advertising (80%), promotions (51%), word-of-mouth (31.8%) and interactive marketing (23%). This implies that social media advertising is the most common type of marketing communications and social media interactive marketing is the least common type of same to the respondents in this study.

Table 4.12
Demographic Distribution of Respondents

		Frequency	Percentage (%)
Gender	Male	252	46.3
	Female	292	53.7
Age	Less than 25years	269	49.4
	26 to 35years	188	34.6
	36 to 45years	58	10.7
	46 to 55years	13	2.4
Highest Education Level	Diploma	81	14.9
	Bachelor's Degree	252	46.3
	Master's Degree	142	26.1
	PhD	13	2.4

Table 4.12 Continued

Ethnicity	PhD	62	11.4
	Others	4	.7
	Melayu	321	59.0
	Chinese	105	19.3
	Indian	71	13.1
	Others	47	8.6
Social Media Platforms for Automotive Brands	Facebook	450	82.7
	Twitter	88	16.2
	YouTube	222	40.8
	Instagram	167	30.7
Types of Social Media Marketing Communications	Advertisement	436	80.1
	Promotions	282	51.8
	Interactive Marketing	125	23.0
	Word-of-Mouth	173	31.8

4.5 Descriptive Statistics for Measured Variables

This section presents the descriptive statistics of the study variables. The descriptive statistics aimed to describe the data and determine the mean and standard deviation values. This section presents the descriptive analysis of the dimensions and the measured variables, followed by the sections where the results of the descriptive analyses of the items of the variables are presented separately. Table 4.13 presents the mean and standard deviations of the measured variables. The mean and standard deviations of the variables and dimensions of automotive CBBE range from 3.62 to 4.12 and from 0.48 to 0.63 respectively. The mean and standard deviation for brand awareness are 4.12 and 0.59 respectively. The mean and standard deviation for hedonic brand image are 3.88 and 0.58. The mean and standard deviation for functional brand image are 3.93 and 0.53. For brand sustainability, the mean and

standard deviation are 3.88 and 0.59 respectively. Meanwhile, the mean and standard deviation for automotive CBBE are 3.95 and 0.48.

Furthermore, the mean and standard deviation for social media advertising are 3.78 and 0.60 respectively. Social media promotion has a mean and standard deviation of 3.62 and 0.63 respectively. The mean and standard deviation of social media interactive marketing are 3.83 and 0.59 respectively. Social media word-of-mouth has the mean and standard deviation 3.77 and 0.60 respectively. Finally, the mean and standard deviation for consumer response are 3.47 and 0.83 respectively. The values of mean for all the variables demonstrate that there is a moderate agreement for all the variables and dimensions understudied in this study. Furthermore, the values of standard deviations reveal no serious disparity in the responses of the respondents.

Table 4.13
Descriptive Statistics of Variables and Dimensions

Variables/Dimensions	Number of Items	Mean	Std. Deviation
Brand Awareness	8	4.12	.59
Hedonic Brand Image	7	3.88	.58
Functional Brand Image	24	3.93	.53
Brand Sustainability	8	3.88	.59
Automotive CBBE	47	3.95	.48
Social Media Advertising	8	3.78	.60
Social Media Promotion	8	3.62	.63
Social Media Interactive Marketing	5	3.83	.59
Social Media Word-of-Mouth	7	3.77	.60
Consumer Response	7	3.47	.83

4.5.1 Descriptive Statistics for Automotive Consumer-Based Brand Equity

Table 4.14 presents the results of the descriptive analysis of the items measuring Automotive CBBE. The mean values range between 4.38 and 3.76. These values imply that majority of the respondents agree with the items measuring the Automotive CBBE variable. The item (I can easily recognize the symbol/logo of BRAND X) with the highest mean value has 4.38, which shows that the symbol and logo of an automotive brand are the most recognized brand elements for the respondents in this study. Furthermore, the standard deviations of all the items measuring Automotive CBBE are below two (2), which show that the responses for Automotive CBBE are not exclusively dispersed from each other.

Table 4.14
Descriptive Statistics of Automotive CBBE

Code	Items	Mean	Std. Deviation
Brand Awareness			
CBBEBA1	I can recognize BRAND X among other car brands.	4.20	.808
CBBEBA2	I know what BRAND X cars looks like.	4.15	.796
CBBEBA3	I can easily recognize the names of BRAND X cars.	4.16	.832
CBBEBA4	Several specifications of BRAND X instantly come to my mind	3.79	.891
CBBEBA5	I can easily recognize the symbol/logo of BRAND X	4.38	.755
CBBEBA6	I am aware of the personality of BRAND X cars	3.97	.889
CBBEBA7	BRAND X is a well-known automotive brand	4.24	.746
CBBEBA8	I know the country-of-origin of BRAND X	4.13	.983
Hedonic Brand Image			
CBBEHBI1	BRAND X is desirable	3.97	.766
CBBEHBI2	BRAND X has unique features	3.98	.795

Table 4.14 Continued

CBBEHB13	BRAND X provides excellent value to its users	4.00	.765
CBBEHB14	BRAND X improves the way I am perceived by others	3.83	.813
CBBEHB15	BRAND X would give me social approval	3.76	.798
CBBEHB16	BRAND X makes fast cars	3.77	.813
CBBEHB17	BRAND X makes reliable cars	3.90	.784
Functional Brand Image			
CBBEFBI1	BRAND X makes cars with very high engine performance reliability	3.78	.830
CBBEFBI2	BRAND X makes cars with consistent engine performance	3.88	.743
CBBEFBI3	BRAND X makes cars with acceptable standard of engine quality	3.97	.721
CBBEFBI4	BRAND X cars with very good engine power	3.91	.736
CBBEFBI5	BRAND X makes cars with good engine transmission	3.90	.762
CBBEFBI6	BRAND X makes cars with good mechanical quality	3.87	.763
CBBEFBI7	BRAND X has structurally attractive cars	4.01	.788
CBBEFBI8	BRAND X has cars with very good designs	4.00	.748
CBBEFBI9	BRAND X has cars with very good model variety	4.03	.794
CBBEFBI10	BRAND X has cars with attractive paint	3.99	.752
CBBEFBI11	BRAND X has cars with good body style	4.05	.765
CBBEFBI12	BRAND X has cars with overlook ability	3.88	.780
CBBEFBI13	BRAND X has cars with trunk/boot volume	3.88	.767
CBBEFBI14	BRAND X has cars with trunk/boot accessibility	3.86	.790
CBBEFBI15	BRAND X has cars with interiors that have very good functionalities	3.88	.753
CBBEFBI16	BRAND X has cars with interiors that are very easy to use	3.92	.746

Table 4.14 Continued

CBBEFBI17	BRAND X has cars with beautiful interiors	3.97	.736
CBBEFBI18	BRAND X has cars with quality interiors	3.99	.754
CBBEFBI19	BRAND X has cars with no interior noise	3.79	.834
CBBEFBI20	BRAND X has cars with good driving stability	3.86	.777
CBBEFBI21	BRAND X has cars with good steering handling	3.94	.737
CBBEFBI22	BRAND X has cars with firm brakes	3.95	.724
CBBEFBI23	BRAND X has cars with good cooling system	4.03	.716
CBBEFBI24	BRAND X has cars with good suspension	3.97	.743
	Brand Sustainability		
CBBEBS1	BRAND X has cars which are environmentally safe	3.90	.755
CBBEBS2	BRAND X has cars which are environmentally responsible	3.88	.776
CBBEBS3	BRAND X has healthy cars	3.89	.768
CBBEBS4	BRAND X has cars with efficient fuel usage	3.91	.825
CBBEBS5	BRAND X cars do not pollute the environment	3.77	.823
CBBEBS6	BRAND X has ecofriendly cars	3.87	.815
CBBEBS7	BRAND X has cars with low cost of maintenance	3.86	.875
CBBEBS8	It is easy to get the spare parts of BRAND X cars	4.01	.868

4.5.2 Descriptive Statistics for Social Media Advertising

Table 4.8 displays the results of the descriptive analysis which describe the Social Media Advertising variable. The mean values range from 3.84 to 3.69. These values can be interpreted as thus, majority of the respondents agree with the items measuring Social Media Advertising. “BRAND X's advertisements on social media give me useful information about BRAND X” is the item with highest mean value.

Hence, useful information seems to be the most appealing stimulus in advertisements on social media for respondents in this study. Finally, the standard deviations of all the items measuring Social Media Advertising are below two (2) which evince that, there is no major dispersion in the Social Media Advertising data.

Table 4.15
Descriptive Statistics of Social Media Advertising

Code	Item	Mean	Std. Deviation
SMA1	BRAND X's advertisements on social media offered me something new about BRAND X.	3.81	.820
SMA2	BRAND X's advertisements on social media give me useful information about BRAND X.	3.84	.806
SMA3	BRAND X's advertisements on social media give me credible information about BRAND X.	3.82	.817
SMA4	BRAND X's advertisements on social media are creative	3.81	.873
SMA5	BRAND X's advertisements on social media are original	3.76	.835
SMA6	BRAND X's advertisements on social media are different from other competing car brands	3.75	.849
SMA7	BRAND X's advertisements on social media helped me in forming an opinion about BRAND X	3.77	.812
SMA8	I am persuaded by advertising campaigns of BRAND X on social media	3.69	.831

4.5.3 Descriptive Statistics for Social Media Promotion

The result of the descriptive statistics for Social Media Promotion is presented in Table 4.16. The result shows that, “Promotion information are announced on social media by BRAND X” is the item with highest mean value (3.70) while “Coupons are offered on social media by BRAND X” is the item with the lowest value (3.54). The range of the mean values for the Social Media Promotion variable demonstrate that, majority of the respondents agree with the entire measures of Social Media

Promotion. Finally, the values of standard deviation for the items are below two (2), therefore acceptable.

Table 4.16
Descriptive Statistics of Social Media Promotion

Code	Items	Mean	Std. Deviation
SMP1	Price deals are frequently made on social media by BRAND X	3.65	.873
SMP2	Price reductions are given on social media by BRAND X	3.56	.900
SMP3	Product-trials are announced on social media by BRAND X	3.66	.816
SMP4	Promotion information are announced on social media by BRAND X	3.70	.842
SMP5	Gifts are offered in on social media by BRAND X	3.60	.877
SMP6	Discounts/rebates are offered on social media by BRAND X	3.62	.836
SMP7	Coupons are offered on social media by BRAND X	3.54	.849
SMP8	Service deals are given on social media by BRAND X	3.64	.809

4.5.4 Descriptive Statistics for Social Media Interactive Marketing

Table 4.17 presents the descriptive analysis for the items measuring Social Media Interactive Marketing. The mean values for the items range between 3.91 and 3.79. These values indicate that majority of the respondents agree with the items measuring Social Media Interactive Marketing. “Social media is used to improve BRAND X's brand images” is the item with the highest mean value which indicate that, respondents agree more with the possibility of improving the image of a brand through the social media platforms.

Table 4.17

Descriptive Statistics of Social Media Interactive Marketing

Code	Items	Mean	Std. Deviation
SMIM1	Social media is used to raise awareness about BRAND X	3.87	.745
SMIM2	Social media is used to improve BRAND X's brand images	3.91	.769
SMIM3	Social media is used to evoke sales of BRAND X's cars.	3.79	.776
SMIM4	Social media can be used to link BRAND X's website	3.81	.757
SMIM5	I can exchange my opinion about BRAND X with other customers on social media	3.81	.790

4.5.5 Descriptive Statistics for Social Media Word-of-Mouth

Table 4.18 presents the descriptive analysis for the items measuring Social Media Word-of-Mouth. The mean values range from 3.87 for “Both positive and negative comments are posted by consumers of BRAND X on social media” to 3.66 for “BRAND X is recommended to me on social media”. These values demonstrate that, majority of the respondents agree with the measures of Social Media Word-of-Mouth. The Standard deviation values for the entire items measuring this variable are below two (2) which are therefore acceptable.

Table 4.18

Descriptive Statistics of Social Media Word-of-Mouth

Code	Items	Mean	Std. Deviation
SMWOM1	I often consult other consumers' review of BRAND X on social media	3.77	.802
SMWOM2	I often gather information about BRAND X from other consumers' review on social media	3.78	.774
SMWOM3	Consumers' review on social media helps me make decisions BRAND X	3.80	.745
SMWOM4	After consulting consumers' review of BRAND X on social media, I am confident about BRAND X.	3.86	.780

Table 4.18 Continued

SMWOM5	Both positive and negative comments are posted by consumers of BRAND X on social media	3.87	.783
SMWOM6	I am encouraged to buy BRAND X car by what social media users are posting about BRAND X	3.71	.832
SMWOM7	BRAND X is recommended to me on social media	3.66	.927

4.5.6 Descriptive Statistics for Consumer Response

Table 4.19 presents the descriptive analysis for the items measuring Consumer Response. The values of mean range between 3.62 for “I consider buying BRAND X as my first choice” and 3.23 for “I will not buy other car brands if BRAND X is not available”. This demonstrate that, the responses mainly fall between agree and neutral. Meanwhile, the standard deviation are below 2 which reveal that, the data is not exclusively dispersed.

Table 4.19
Descriptive Statistics of Consumer Response

Code	Items	Mean	Std. Deviation
CR1	I consider buying BRAND X as my first choice.	3.62	.946
CR2	If BRAND X is temporarily off the market, I wouldn't buy another brand.	3.32	1.073
CR3	There is high probability that I will recommend BRAND X to others.	3.70	.882
CR4	BRAND X is my first choice	3.53	1.022
CR5	I consider myself to be loyal to BRAND X	3.47	1.064
CR6	I will not buy other car brands if BRAND X is not available	3.23	1.181
CR7	I am committed to buying BRAND X	3.42	1.101

4.6 Structural Equation Modeling

The use of SEM in this study involved the development of both the measurement model and the structural model through the examination of parameter estimates and goodness of fit (Bryne, 2010) through maximum likelihood procedures. It is

important to note that all the hypothesized measures for the constructs were reflective. The following sections present the processes of developing both the measurement and structural models for the hypothesized model in this study.

4.6.1 The Measurement Model

The measurement model is effectuated through Confirmatory Factor Analysis (CFA). The CFA is employed to determine the relationships between the observed variables (items) and the variables they are measuring. The measurement model is used to establish unidimensionality, convergent, discriminant and nomological validities through CFA (Hair et al., 2010). To ensure unidimensionality, CFA is conducted on individual constructs and followed by the CFA conducted on the whole hypothesized model. In processing the CFA, the Maximum Likelihood Estimation (MLE) was adopted for parameter estimation given the sample size in this is greater than 100 (Ding, Velicer, & Harlow, 1995). The CFA for individual constructs are presented in the following sections.

4.6.1.1 Measurement Model for Individual Constructs and Dimensions

Table 4.20 presents the summary of the goodness of fit indices of the CFA of measurement models. The results show that, the individual models have reasonable good fit as the Root Mean Square Error of Approximation (RMSEA) indicate values of less than .080 for the entire variables and dimensions. Also, the values of Goodness-of-fit statistic (GFI) and Adjusted Goodness-of-Fit statistic (AGFI) evinced the values greater than .80 which indicate the threshold for good fit. Finally, the values of Comparative fit index ($CFI > .90$), Tucker-Lewis Index ($TIL > .90$),

Normed-fit index (NFI>.90), Incremental fit index (IFI>.90) are all above the required standards demonstrating a goodness of fit for the incremental fit levels for the individual variables and dimensions. To ensure the goodness of fit for the parsimonious level, the values of CMIN/df are entirely below the standard value (Byrne, 2010; Hair et al., 2010). The process of ensuring the goodness of fit leads to the removal of 14 items (SMA6, SMA7, SMA8, SMIM5, SMWOM6, CBBEFB11, CBBEBS1, CBBEBS2, CBBEBS3, CBBEBS4, CBBEBA6, CBBEBA7, CBBEBA8 and CBBEHBI7) from the 82 items proposed to measure the items, leaving the study with 68 items for the measured variables in this study.

Table 4.20
Goodness-of-Fit statistics for Individual Constructs and Dimensions

Variables	CFA items	CMIN/df	GFI	AGFI	CFI	TLI	RMSEA
Threshold Values		<5	>0.8	>0.8	>0.9	>0.9	<0.08
Consumer Response	7		.990	.971	.996	.991	.043
CBBEFBI	23	2.67	.918	.892	.956	.946	.055
CBBEHBI	6	2.83	.986	.964	.989	.979	.058
CBBEBA	8	2.60	.979	.958	.982	.972	.054
CBBEBS	5	2.82	.992	.970	.992	.981	.058
Social Media Advertising	6	3.21	.984	.958	.987	.975	.064
Social Media Promotion	8	4.03	.976	.933	.981	.959	.075
Social Media Interactive Marketing	4	2.46	.998	.977	.998	.989	.052
Social Media Word-of-Mouth	7	1.51	.991	.978	.996	.993	.031

4.6.1.2 Measurement Model of the Hypothesized Model

The hypothesized model in this study is made up of four exogenous variables and two endogenous variables making a total of six latent variables. To this end, the six latent variables are measured with 68 observed constructs after 14 items have been

deleted from the single-group analyses conducted on both the exogenous and endogenous variables. The CFA of the combination of all the variables was combined and examined at this stage. The goodness of fit of the hypothesized model was assessed by determining the combination of chi-square/df, p-value, GFI, AGFI, TLI, CFI, TLI, NFI, PNFI and RMSEA indices as suggested by other researchers (Hu & Bentler, 1999; Bryne, 2010; Hair et al., 2010). On this basis, model modification becomes inevitable to ensure the fit of the model is achieved. However, Hair et al. (2010) advised that all these indices can be adjusted based on model characteristics such as 'sample sizes, model complexities, and degrees of errors in model specification' (Hair et al., 2010 p. 672).

Table 4.21 presents the parameters for ensuring goodness of fit for the hypothesized model. The result shows that, the ratio of chi-square to degree of freedom was not greater than 5.0 ($\chi^2/df = 2.09$) conforming to the suggestions of Hair et al. (2010). The RMSEA (0.045), IFI (0.911) and PNFI (0.794) are all above the standard values as suggested by Hair et al. (2010). It is worth noting that, the goodness of fit was achieved after several modifications of the model which was done by deleting additional 13 items (CBBEFBI4, CBBEFBI19, CBBEFBI12, CBBEFBI17, CBBEFBI18, CBBEFBI19, CBBEHBI6, CBBEHBI5, CBBEBS5, CR6, SMWOM1, SMWOM7 and SMP7) with extremely high modification indices following the suggestion by Hu and Bentler (1999), Bryne (2010) and Hair et al. (2010).

The modification yielded a relatively fit model as presented in Figure 4.4. Subsequently, Table 4.22 presents the factor loadings of the 55 retained items from the 68 items hypothesized to measure the constructs of the model. As suggested by

Bryne (2010), the *t*-values of each factor loading was significant at the level of 0.001 and above 1.96. The following sections present the assessment of the validity and reliability of the hypothesized model. The assessment of validity are of three kinds which include; convergent, discriminant and nomological validities.

Table 4.21

Goodness-of-Fit statistics for Hypothesized Model

	CFA items	CMIN/df	CFI	TLI	NFI	IFI	PNFI	RMSEA
Threshold Values		<5	>0.9	>0.9	>0.9	>0.9	>0.6	<0.08
Final Model	55	2.08	.911	.906	.843	.911	.794	.045

Table 4.22

Composite Indicators for Hypothesized Model

Code	Items	Estimate	t- Value	P- Value
SMWOM5	Both positive and negative comments are posted by consumers of BRAND X on social media	.648	14.536	***
SMWOM4	After consulting consumers' review of BRAND X on social media, I am confident about BRAND X.	.763	12.683	***
SMWOM3	Consumers' review on social media helps me make decisions BRAND X	.787	12.053	***
SMWOM2	I often gather information about BRAND X from other consumers' review on social media	.750	12.996	***
SMP8	Service deals are given on social media by BRAND X	.712	14.373	***
SMP6	Discounts/rebates are offered on social media by BRAND X	.741	13.979	***
SMP5	Gifts are offered in on social media by BRAND X	.762	13.627	***
SMP4	Promotion information are announced on social media by BRAND X	.735	13.849	***
SMP3	Product-trials are announced on social media by BRAND X	.709	14.167	***
SMP2	Price reductions are given on social media by BRAND X	.618	15.140	***

Table 4.22 Continued

SMP1	Price deals are frequently made on social media by BRAND X	.678	14.685	***
SMIM4	Social media can be used to link BRAND X's website	.794	11.846	***
SMIM3	Social media is used to evoke sales of BRAND X's cars.	.762	13.645	***
SMIM2	Social media is used to improve BRAND X's brand image	.750	13.572	***
SMIM1	Social media is used to raise awareness about BRAND X	.716	12.915	***
SMA5	BRAND X's advertisements on social media are original	.654	14.843	***
SMA4	BRAND X's advertisements on social media are creative	.741	13.791	***
SMA3	BRAND X's advertisements on social media give me credible information	.815	12.109	***
SMA2	BRAND X's advertisements on social media give me useful information	.768	13.304	***
SMA1	BRAND X's advertisements on social media offered me something new	.690	14.491	***
CR1	I consider buying BRAND X as my first choice.	.748	14.440	***
CR2	If BRAND X is temporarily off the market, I wouldn't buy another brand.	.702	14.925	***
CR3	There is high probability that I will recommend BRAND X to others.	.734	14.605	***
CR4	BRAND X is my first choice	.853	12.122	***
CR5	I consider myself to be loyal to BRAND X	.853	12.130	***
CR7	I am committed to buying BRAND X	.692	15.010	***
CBBEHBI4	BRAND X improves the way I am perceived by others	.654	14.783	***
CBBEHBI3	BRAND X provides excellent value to its users	.736	13.739	***
CBBEHBI2	BRAND X has unique features	.814	11.875	***
CBBEHBI1	BRAND X is desirable	.748	13.526	***
CBBEBS6	BRAND X has ecofriendly cars	.811	7.108	***
CBBEBS7	BRAND X has cars with low cost of maintenance	.661	12.074	***
CBBEBS8	It is easy to get the spare parts of BRAND X cars	.612	12.962	***
CBBEFBI2	BRAND X makes cars with consistent engine performance	.676	15.397	***

Table 4.22 Continued

CBBEFBI3	BRAND X makes cars with acceptable standard of engine quality	.702	15.243	***
CBBEFBI5	BRAND X makes cars with good engine transmission	.673	15.459	***
CBBEFBI6	BRAND X makes cars with good mechanical quality	.688	15.344	***
CBBEFBI7	BRAND X has structurally attractive cars	.650	15.549	***
CBBEFBI8	BRAND X has cars with very good designs	.668	15.462	***
CBBEFBI10	BRAND X has cars with attractive paint	.656	15.515	***
CBBEFBI11	BRAND X has cars with good body style	.661	15.488	***
CBBEFBI13	BRAND X has cars with trunk/boot volume	.650	15.552	***
CBBEFBI14	BRAND X has cars with trunk/boot accessibility	.647	15.569	***
CBBEFBI15	BRAND X has cars with interiors that have very good functionalities	.711	15.160	***
CBBEFBI16	BRAND X has cars with interiors that are very easy to use	.702	15.222	***
CBBEFBI20	BRAND X has cars with good driving stability	.672	15.409	***
CBBEFBI21	BRAND X has cars with good steering handling	.701	15.236	***
CBBEFBI22	BRAND X has cars with firm brakes	.728	15.048	***
CBBEFBI23	BRAND X has cars with good cooling system	.683	15.345	***
CBBEFBI24	BRAND X has cars with good suspension	.697	15.281	***
CBBEBA5	I can easily recognize the symbol/logo of BRAND X	.745	14.278	***
CBBEBA4	Several specifications of BRAND X instantly come to my mind	.677	14.958	***
CBBEBA3	I can easily recognize the names of BRAND X cars	.825	12.580	***
CBBEBA2	I know what BRAND X cars looks like.	.849	11.778	***
CBBEBA1	I can recognize BRAND X among other car brands.	.808	13.063	***

4.6.1.2.1 Construct Reliability and Convergent Validity of the Hypothesized Model

Convergent validity is assessed through factor loadings. The factor loadings of the items of the hypothesized model revealed in Table 4.23 reveals that the factor loadings are above 0.60 indicating that the hypothesized items truly have strong relationship with the conceptualized model, which is an evidence of establishing convergent validity (Hair et al., 2010). Furthermore, convergent validity is determined through composite reliability of each of the constructs and through Average Variance Extracted (AVE) (Hair et al., 2010). Table 4.23 presents the results of the AVE and composite reliability for all the latent variables in the hypothesized model. The AVE of the variables in this study range from 0.533 to 0.588 and the composite reliability range between 0.827 and 0.966. The results evinced that, convergent validity is established for the hypothesized model as the AVE and composite reliability are above cut-off values of 0.50 and 0.70 respectively (Hair et al., 2010).

Table 4.23
Composite Reliability and AVE of Hypothesized Model

Construct	Code	Factor Loadings	AVE	Composite Reliability
Social Media Word-of-Mouth	SMWOM5	.648	0.546	0.827
	SMWOM4	.763		
	SMWOM3	.787		
	SMWOM2	.750		
Social Media Promotion	SMP8	.712	0.503	0.875
	SMP6	.741		
	SMP5	.762		
	SMP4	.735		
	SMP3	.709		
	SMP2	.618		
	SMP1	.678		

Table 4.23 Continued

Social Media Interactive Marketing	SMIM4	.794	0.572	0.842
	SMIM3	.762		
	SMIM2	.750		
	SMIM1	.716		
Social Media Advertising	SMA5	.654	0.541	0.854
	SMA4	.741		
	SMA3	.815		
	SMA2	.768		
	SMA1	.690		
Consumer Response	CR1	.748	0.588	0.895
	CR2	.702		
	CR3	.734		
	CR4	.853		
	CR5	.853		
	CR7	.692		
Automotive CBBE	CBBEHBI5	.613	0.503	0.966
	CBBEHBI4	.654		
	CBBEHBI3	.736		
	CBBEHBI2	.814		
	CBBEHBI1	.748		
	CBBEBS6	.811		
	CBBEBS7	.661		
	CBBEBS8	.612		
	CBBEFBI2	.676		
	CBBEFBI3	.702		
	CBBEFBI5	.673		
	CBBEFBI6	.688		
	CBBEFBI7	.650		
	CBBEFBI8	.668		
	CBBEFBI10	.656		
	CBBEFBI11	.661		
	CBBEFBI13	.650		
	CBBEFBI14	.647		
	CBBEFBI15	.711		
	CBBEFBI16	.702		
	CBBEFBI20	.672		
	CBBEFBI21	.701		
	CBBEFBI22	.728		
	CBBEFBI23	.683		
	CBBEFBI24	.697		
	CBBEBA5	.745		
	CBBEBA4	.677		
	CBBEBA3	.825		
	CBBEBA2	.849		
	CBBEBA1	.808		

4.6.1.2.2 Discriminant Validity

Discriminant validity is established when the average variance extracted for any two constructs that are measured must be greater than the square of correlations that exist between them (Fornell & Larcker, 1981). Discriminant validity also confirms that individual measurement indicator only represent one latent construct without cross-loading. Discriminant validity is calculated by comparing the squared correlation between two constructs with the square root of the average variance extracted between those two constructs. The square root of AVE should be greater than the squared correlation estimates to establish discriminant validity (Fornell and Larcker, 1981; Hair et al., 2010). Table 4.23 shows acceptable discriminant validity between each pair of construct, with all square roots of AVE greater than the squared correlation between the constructs.

Table 4.23

Test of Discriminant Validity

Variables	CBBE	SMA	SMP	SMIM	SMWOM	CR
CBBE	0.709					
SMA	.448	0.735				
SMP	.462	.442	0.709			
SMIM	.332	.494	.501	0.756		
SMWOM	.446	.376	.456	.396	0.738	
CR	.436	.200	.299	.163	.295	0.766

Note: The bold numbers on the diagonal are the Square Root of AVE; off diagonal numbers are the squared correlations among constructs.

Automotive Consumer-Based Brand Equity (CBBE), Social Media Advertising (SMA), Social Media Promotion (SMP), Social Media Interactive Marketing (SMIM), Social Media Word-of-Mouth (SMWOM), Consumer Response (CR).

4.6.1.2.3 Nomological Validity

Nomological validity has to do with the entire relationships between the measures of the constructs in a model in relation to other constructs (Houston, 2004). According to Hair et al (2010), nomological validity can be establish through correlation matrix

of the constructs in involved in the hypothesized model. These results indicate that, the hypothesized model confirms with the theoretical model of CSRM. The findings presented in Table 4.24 reveals that, there are positive and significant relationships between the constructs in the hypothesized model. Sequel to the series of measurement models presented above, the following sections presents the result of structural model.

Table 4.24

Test of Nomological Validity

Variables	CBBE	SMA	SMP	SMIM	SMWOM	CR
CBBE	1.000					
SMA	.670***	1.000				
SMP	.680***	.665***	1.000			
SMIM	.577***	.703***	.708***	1.000		
SMWOM	.668***	.614***	.676***	.630***	1.000	
CR	.661***	.448***	.547***	.404***	.544***	1.000

Automotive Consumer-Based Brand Equity (CBBE), Social Media Advertising (SMA), Social Media Promotion (SMP), Social Media Interactive Marketing (SMIM), Social Media Word-of-Mouth (SMWOM), Consumer Response (CR).

4.5.2 The Structural Model

The structural models is developed to examine the causal relationships between the exogenous variables (Social Media Advertising, Social Media Promotion, Social Media Interactive Marketing and Social Media Word-of-Mouth) and endogenous constructs (Automotive CBBE and Consumer Response). Hence, the structural model is established through model fitting and model evaluation. The standardized estimates of structural model presented in Figure 4.5 evinced that, the structural model is relatively a fit model. The overall goodness-of-fit indices lend credence to the acceptance of model as fitting the data with $\chi^2/df = 2.08$, CFI = 0.911, TLI = 0.906, PNFI = 0.911 and RMSEA = 0.045. Furthermore, it could be observed in Table 4.25 that the fit statistics that are obtained for this theoretical model are the

same as those achieved for the CFA measurement model thus confirming that the fitness of the model to data is well grounded.

Table 4.25

Goodness-of-Fit Statistics for Measurement and Structural Models

	CFA items	CMIN/df	CFI	TLI	IFI	PNFI	RMSEA
Threshold Values		<5	>0.9	>0.9	>0.9	>0.6	<0.08
Measurement Model	55	2.08	.911	.906	.911	.794	.045
Structural Model	55	2.08	.911	.906	.911	.796	.045



UUM
Universiti Utara Malaysia

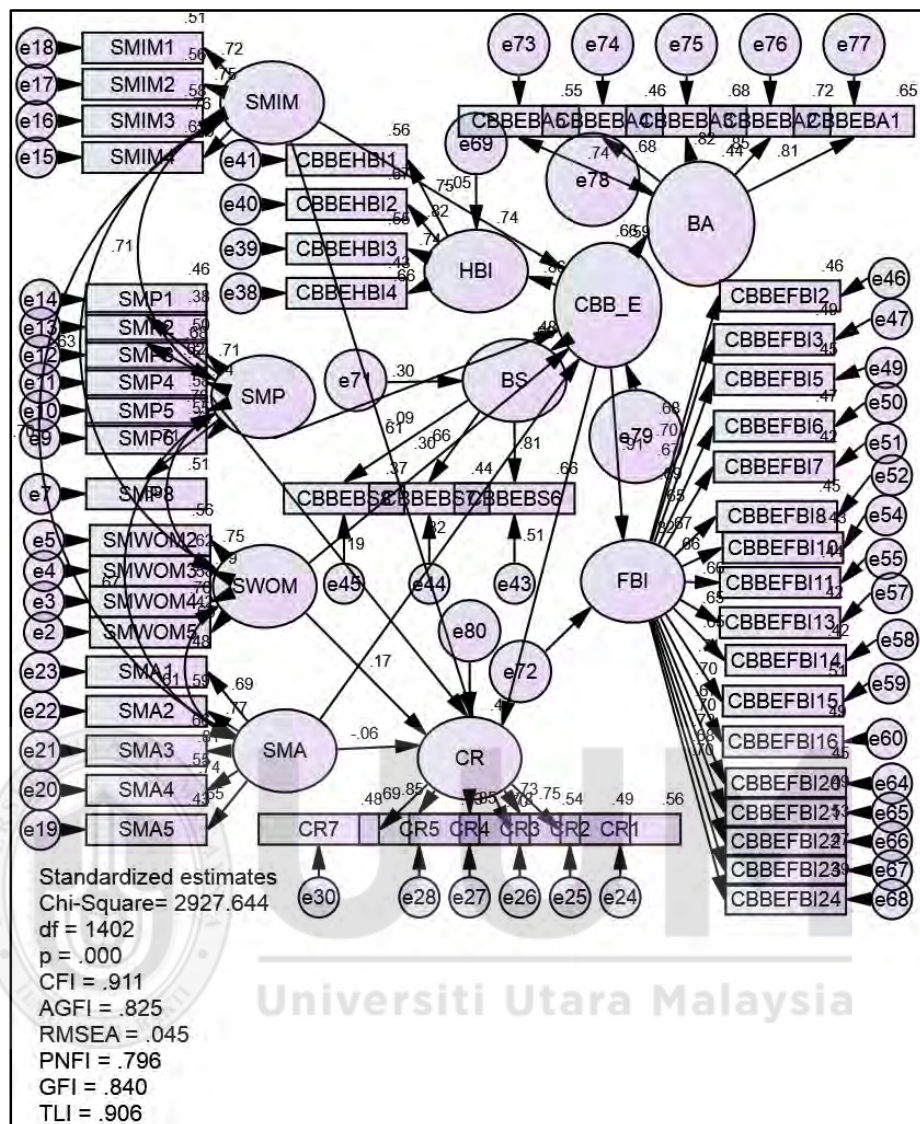


Figure 4.5. Structural Model of the Hypothesized Model

4.5.2.1 Direct Relationships

After establishing the goodness of fit of the structural model, the next stage is evaluating the model to examine the causal relationships between the constructs as represented by the formulated hypotheses. For this purpose, we examine the parameter estimates which are depicted by one-headed arrows on the path diagram as shown in Figure 4.6. The theoretical model presented in Figure 4.6 is specified to test the 9 causal paths, which are represented by H1, H2, H3, H4, H5, H6, H7, H8

and H9. The results presented in Table 4.27 demonstrate that, the entire 9 hypotheses formulated in this study are statistically accepted. The result of the individual hypotheses are discussed as follow.

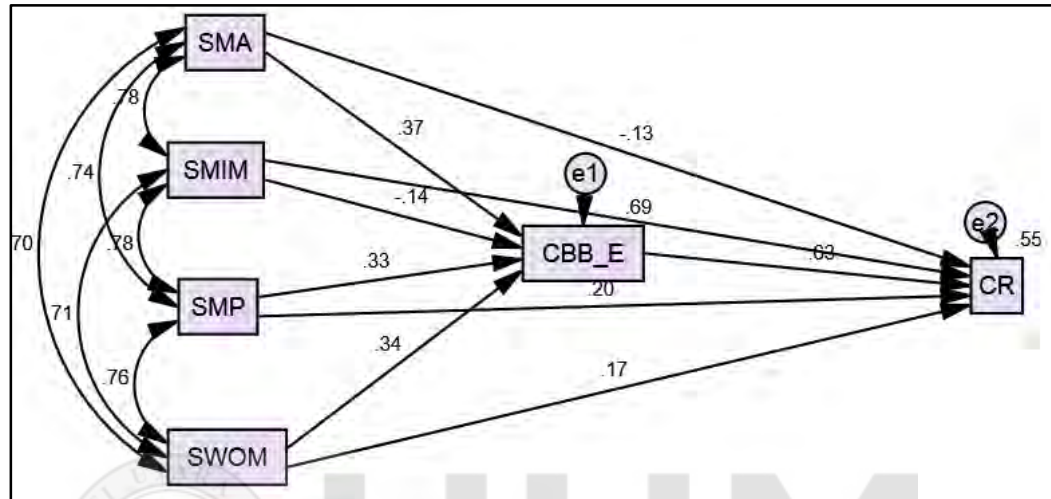


Figure 4.6. Structural Model Evaluation

H₁: Social media advertising has significant relationship with CBBE of automotive brands

The findings presented in Table 4.26 indicate that, the path coefficient between Social media advertising and CBBE of automotive brands is positive and statistically ($\beta = 0.369$, $t = 8.991$, $p < 0.01$). This implies that, for every increase in social media advertising, there is an expected 36.9% increase in CBBE of automotive brands. On this basis, this particular hypothesis is accepted.

H₂: Social media promotion has significant relationship with CBBE of automotive brands

This hypothesis is confirmed by the results of SEM presented in Table 4.26. The path coefficient between social media promotion and CBEE of automotive brands reveal a positive and statistically significant relationship ($\beta = 0.335$, $t = 7.561$, $p < 0.01$). This result evinced that, for every increase in social media promotion, there is an expected 33.5% increase in CBEE of automotive brands. This result statistically supports the above hypothesis.

H3: Social media interactive marketing has significant relationship with CBEE of automotive brands

The result of the path coefficient between social media interactive marketing and CBEE of automotive brands reveal that, the relationship between social media interactive marketing and CBEE automotive brands is statistically significant ($\beta = -0.145$, $t = -3.296$, $p < 0.05$). This result indicates that, for every increase in social media interactive marketing there is an expected increase of 14.5% in CBEE of automotive brands. Even though, the relationship between social media interactive marketing and CBEE of automotive brands is negative, yet this hypothesis is supported.

H4: Social media word-of-mouth has significant relationship with CBEE of automotive brands

The results presented in Table 4.26 confirm the above hypothesis. The path coefficient ($\beta = 0.344$, $t = 8.835$, $p < 0.01$) evinced that, the relationship between social media word-of-mouth and CBEE of automotive brands is strong, positive and

statistically significant. The implication of this result is that, for every increase in social media word-of-mouth there is an expected 34% increase in CBBE of automotive brands. On this basis, this hypothesis is accepted.

H₅: Social media advertising has significant relationship with consumer response

The path coefficient from the relationship between social media advertising and consumer response reveals a statistically significant relationship ($\beta = -0.135$, $t = -2.533$, $p < 0.05$). This result is interpreted as thus, for every increase in social media advertising, there is an automatic 13.5% decrease in consumer response. Even though, the relationship between social media advertising and consumer response is negative, yet this hypothesis is accepted.

H₆: Social media promotion has significant relationship with consumer response

The above hypothesis was tested using SEM. The results presented in Table 4.26 reveal that, the path coefficient between social media promotion and consumer response is positive and statistically significant ($\beta = 0.196$, $t = 3.499$, $p < 0.01$). This result confirm that, for every increase in social media promotion, there is 19.6% increase in consumer response. This serves a proof to accept this hypothesis.

H₇: Social media interactive marketing has significant relationship with consumer response

This hypothesis is confirmed with the result presented in Table 4.26. The result demonstrates that, the path coefficient between social media interactive marketing and consumer response ($\beta = -0.128$, $t = -2.394$, $p < 0.05$) is statistically significant. The implication of this result is that, for every increase in Social Media Interactive Marketing there is an expected 12.8% decrease consumer response. Even though, the relationship between social media interactive marketing and consumer response is negative, still this result serves the proof for rejecting this hypothesis.

H₈: Social media word-of-mouth has significant relationship with consumer response

The path coefficient presented in Table 4.26 revealed the relationship between social media word-of-mouth and consumer response ($\beta = 0.167$, $t = 3.323$, $p < 0.01$) is positively and statistically significant. The interpretation of this finding is that, for every increase in social media word-of-mouth, there is 16.7% expected increase in consumer response. As such, this hypothesis is accepted.

H₉: CBBE of automotive brands has positive relationship with consumer response

The relationship between CBBE of automotive brands and consumer response is confirmed with the path coefficient presented in Table 4.26. The results reveal that, the relationship between CBBE automotive brands and consumer response is strong, positive and statistically significant ($\beta = 0.633$, $t = 13.238$, $p < 0.01$). This implies

that, for every increase in CBBE of automotive brands there is an expected 63% increase in consumer response. As such, this hypothesis is supported.

Table 4.26
Summary of the Tested Hypotheses

Hypotheses	Relationships	β Value	Estimates	S.E.	T- value	P- Value	Remarks
H1	SMA \rightarrow CBBE	.369	.245	.027	8.991	***	Supported
H2	SMP \rightarrow CBBE	.335	.220	.029	7.561	***	Supported
H3	SMIM \rightarrow CBBE	-.145	-.107	.032	-3.296	***	Supported
H4	SMWOM \rightarrow CBBE	.344	.265	.030	8.835	***	Supported
H5	SMA \rightarrow CR	-.135	-.145	.057	-2.533	.011	Supported
H6	SMP \rightarrow CR	.196	.210	.060	3.499	***	Supported
H7	SMIM \rightarrow CR	-.128	-.154	.064	-2.394	.017	Supported
H8	SMWOM \rightarrow CR	.167	.209	.063	3.323	***	Supported
H9	CBBE \rightarrow CR	.633	1.030	.084	12.238	***	Supported

Automotive Consumer-Based Brand Equity (CBBE), Social Media Advertising (SMA), Social Media Promotion (SMP), Social Media Interactive Marketing (SMIM), Social Media Word-of-Mouth (SMWOM), Consumer Response (CR).

***P < 0.01.

4.5.2.2 Indirect Relationship of CBBE

To test the indirect relationship, the result of the bootstrapping is presented in Table 4.27, the bootstrapping is conducted twice. The first bootstrapping is done without the presence of mediation variable while the second is done with the presence of mediation variable. It is expected that, if the direct path is not significant, there is no mediating effect. In addition, the assumption of Zhao, Lynch and Chen (2010) is employed for the interpretation of mediation effect in this study. The results in Table 4.27 shows that the direct relationships between social media advertising ($\beta = .107$, $P < 0.1$), social media promotion ($\beta = .437$, $P < 0.01$), social media interactive marketing ($\beta = -.264$, $P < 0.01$) and social media word-of-mouth ($\beta = .483$, $P < 0.01$) are significant without the mediation of CBBE variable. The interpretation of the results in relations to H10, H11, H12 and H13 are discussed as follows.

H₁₀: CBBE of automotive brands mediates the relationship between social media advertising and consumer response

The results indicated in Table 4.27 show that, the indirect relationship of CBBE on the relationship between social media advertising and consumer response is shown to have partial mediation. This conclusion can be drawn from the fact that both standardized direct effects with mediation ($\beta = -0.135$, $P < 0.1$) and standardized indirect effects ($\beta = 0.234$, $P < 0.01$) were statistically significant. The evaluation of this mediation in line with Zhao et al. (2010) reveals that, a competition mediation of CBBE exist in the relationship between social media advertising and consumer response. Based on this result, H₁₀ is supported.

H₁₁: CBBE of automotive brands mediates the relationship between social media promotion and consumer response

The result presented in Table 4.27 revealed a partial mediation as both standardized direct effects with mediation ($\beta = 0.196$, $P < 0.01$) and standardized indirect effects ($\beta = 0.212$, $P < 0.01$) were statistically significant. The interpretation of this result following Zhao et al. (2010) shows that, a complementary mediation of CBBE exist between the relationship of social media promotion and consumer response. Therefore, the H₁₁ formulated in this study is supported.

H₁₂: CBBE of automotive brands mediates the relationship between social media interactive marketing and consumer response

The result presented in Table 4.27 shows that, both standardized direct effects with mediation ($\beta = -0.128$, $P < 0.01$) and standardized indirect effects ($\beta = -0.092$, $P < 0.01$) were statistically significant. The evaluation of this result in line with Zhao et al. (2010) reveals a complementary mediation of CBBE on the relationship between social media interactive marketing and consumer response. On this basis, the H12 is supported.

H13: CBBE of automotive brands mediates the relationship between social media word-of-mouth and consumer response

As shown in Table 4.27, standardized direct effects with mediation ($\beta = 0.167$, $P < 0.01$) and standardized indirect effects ($\beta = -0.218$, $P < 0.01$) were statistically significant. This result is interpreted in line with Zhao et al. (2010) which shows that, a complementary mediation exists between social media word-of-mouth and consumer response. Therefore, H13 is supported.

Table 4.27

Test for indirect effect of CBBE

Hypotheses	Relationships	Direct Effect without Mediation	Direct Effect with Mediation	Indirect Effect	P-Value	Mediation Type	Decision
H10	SMA > CBBE > CR	.107*	-.135*	0.234	0.001	Competition	Supported
H11	SMP > CBBE > CR	.437***	.196***	0.212	0.001	Complementary	Supported
H12	SMIM > CBBE > CR	-.264***	-.128***	-0.092	0.001	Complementary	Supported
H13	SWOM > CBBE > CR	.483***	.167***	0.218	0.001	Complementary	Supported

Automotive Consumer-Based Brand Equity (CBBE), Social Media Advertising (SMA), Social Media Promotion (SMP), Social Media Interactive Marketing (SMIM), Social Media Word-of-Mouth (SMWOM), Consumer Response (CR).

***P < 0.01; *P < 0.1.

4.5.3 Squared Multiple Correlation for Endogenous Variables (R^2)

The final stage of the model evaluation is determining the amount of variance in both Automotive CBBE and Consumer Response are accounted by the Social Media Marketing Communications. According to Hair et al. (2010), there is no consensus as to the acceptable threshold for R -squared for determining the fitness of a model. Falk and Miller (1992) suggested that the variance of the endogenous construct that is explained by the exogenous construct in any structural model must be greater than or equal to the value of 0.10. Meanwhile, Chin (1998) suggests that the R -squared values of 0.67 is substantial, 0.33 is moderate, and 0.19 is weak.

Table 4.28 presents the R -squared values for the two endogenous variables in the theoretical model of this study. The result shows that, 69% of the variance in Automotive CBBE is collectively explained by Social Media Advertising, Social Media Promotion, Social Media Interactive Marketing and Social Media Word-of-Mouth. Furthermore, 55% of the variance in Consumer Response is collectively accounted by Social Media Advertising, Social Media Promotion, Social Media Interactive Marketing, Social Media Word-of-Mouth and Automotive CBBE. Therefore, following the criteria of both Falk and Miller (1992) and Chin (1998), the two endogenous latent variables showed moderate and acceptable levels of R -squared values.

Table 4.28
Variance Explained in the Endogenous Latent Variables

Endogenous Variables	Variance Explained (R^2)
Automotive CBBE	.693
Consumer Response	.554

4.6 Summary of the Findings

This chapter presented the empirical analysis of the data collected through survey questionnaires in this study. The analysis can be divided into parts for the purpose of summary. The first stage is the aspect of the analysis conducted in SPSS. This stage involves descriptive statistics, which was used to describe the data and the respondents in this study. This was done using simple percentage, mean and standard deviation. SPSS was also used to cleanse the data, starting from adding missing data, analysing outliers, normality, linearity, homoscedasticity and multicollinearity. These series of analysis was conducted to ensure the data is ready for multivariate analysis.

The second stage of the data analysis was carried out using AMOS to specify both the measurement model and structural model of the hypothesized model. The SEM aspect involved ensuring the goodness-of-fit of the individual construct model, exogenous and endogenous models and the whole hypothesized model. The convergent validity, reliability, discriminant validity and nomological validity of the whole model was also established at this stage. Finally, the structural model was specified to examine the goodness-of-fit and to evaluate the hypothesized model in order to examine the path relationships between the exogenous variables and endogenous variables and the indirect relationships of CBBE. The model evaluation was used to test the formulated hypotheses. The result revealed that all the 13 hypotheses formulated in this study were supported. Table 4.29 presents the summary of the tested hypotheses and the summary of their findings. The following chapter presents the discussion of the findings presented in this chapter in details.

Table 4.29

Summary of Hypotheses Tested

Hypotheses	Statements	Findings
H ₁	Social media advertising has a significant relationship with CBBE of automotive brands	Supported
H ₂	Social media promotion has a significant relationship with CBBE of automotive brands	Supported
H ₃	Social media interactive marketing has a significant relationship on CBBE of automotive brands	Supported
H ₄	Social media word-of-mouth has a significant relationship with CBBE of automotive brands	Supported
H ₅	Social media advertising has a significant relationship with consumer response to automotive brands	Supported
H ₆	Social media promotion has a significant relationship with consumer response to automotive brands	Supported
H ₇	Social media interactive marketing has a significant relationship with consumer response to automotive brands	Supported
H ₈	CBBE of automotive brands has a significant relationship with consumer response to automotive brands	Supported
H ₁₀	CBBE of automotive brands mediates the relationship between social media advertising and consumer response	Supported
H ₁₁	CBBE of automotive brands mediates the relationship between social media promotion and consumer response	Supported
H ₁₂	CBBE of automotive brands mediates the relationship between social media interactive marketing and consumer response	Supported
H ₁₃	CBBE of automotive brands mediates the relationship between social media word-of-mouth and consumer response	Supported

CHAPTER FIVE

DISCUSSIONS, IMPLICATIONS AND CONCLUSIONS

5.0 Introductions

This chapter presents the detailed discussions of the findings reported in this research. The theoretical, methodological and practical implications of the findings are also elaborated in relation to previous studies on CBBE, social media marketing communications and consumer response in this chapter. Furthermore, the limitations of this study, recommendations and suggested future study areas are presented in this chapter. In specifics, Section 5.1 presents an overview of the study followed by Section 5.2, where the discussions of the findings are presented. Section 5.3 discusses the implications of the study in relation to theory and practice. The limitations of the study are discussed in Section 5.4 and Section 5.5 presents the recommendations for future studies. Finally, the findings of the study are concluded in Section 5.6.

5.1 Overview of the Study

The main objective of this present study is to examine the direct and indirect relationships between social media marketing communications with CBBE of automotive brands and consumer response. As such, this research examines the relationships between FCC which include social media advertising, social media promotions and social media interactive marketing and UGC represented by social media word-of-mouth, CBBE of automotive brands and consumer response. In specifics, this study provides answers to the following research questions.

1. What are the direct relationships between FCC (Social Media Advertising, Social Media Promotions and Social Media Interactive Marketing), UGC (Social Media Word-of-Mouth) and CBBE of Automotive brands?
2. What are the direct relationships between FCC (Social Media Advertising, Social Media Promotions and Social Media Interactive Marketing), UGC (Social Media Word-of-Mouth) and consumer response?
3. What is the direct relationship between CBBE of Automotive brands and Consumer Response?
4. What are the indirect relationships between FCC (Social Media Advertising, Social Media Promotions and Social Media Interactive Marketing), UGC (Social Media Word-of-Mouth), CBBE and Consumer Response?

To answer the highlighted questions of this research, a mixed-method research approach was employed following the qual-QUANT sequential research design (Creswell, 2013). Thus, the qualitative research method came first by conducting 10 semi-structured interviews among users and brand managers of automotive brands as well as users of social media. This was followed by the quantitative research method, which was effectuated with the use of survey questionnaires distributed among users of four automotive brands in Malaysia; PROTON, PERODUA, TOYOTA and HONDA.

The measurements employed for measuring the understudied variables were refined and validated by employing the multi-stage level of item development proposed by

Churchill (1979). These stages entail the initial data collection, which was conducted through semi-structured interviews. This was followed by recruiting 7 experts to purify the items and determine the relevance and the conformity of the measurements to the operational definitions. Finally, before conducting the main data collection, a pilot study was conducted among 200 students and staff of UUM. The data from the pilot study allowed the researcher to conduct an EFA and assess reliability of the scales. Subsequently, the validated scales were used to conduct the main survey in this study.

The data collected was analyzed using both SPSS and AMOS. SPSS was mainly employed to conduct preliminary analysis and descriptive statistics to describe the respondents in this study. The descriptive statistics summarily revealed that majority of the respondents were aged below 35 years. Also, majority of the respondents follow automotive brands on *Facebook* than other social media platforms, followed by *YouTube* and *Instagram*. *Twitter* happened to be the least used platform for following automotive brands. Such distribution is similar to the report presented by Kormin and Baharun (2016) which indicated that, all the top 10 listed automotive brands in Malaysia employed at least two different types of social media platforms to increase the visibility of their brands and *Facebook* is the most popular among others.

Furthermore, social media advertising was the most commonly seen, liked and read among other FCCs. The descriptive statistics also indicated that majority of the respondents are familiar with social media advertising, social media promotion and social word-of-mouth. Social media interactive marketing is the least popular among the social media marketing communications. This does not only show that, the respondents

in this study have valid experiences of both FCC and UGC types of social media marketing communications but also, provide a proof that, brand managers of automotive brands in Malaysia are devolving various types of marketing communications on their social media platforms.

Additionally, the findings of this study revealed the important factors in the minds of consumers in evaluating automotive brands. These factors were demonstrated in the descriptive analysis and the validated measures of Automotive CBBE revealed in this study. For instance, brand awareness, hedonic brand image, functional brand image and brand sustainability were validated to be important dimensions of CBBE of automotive brands. In specifics, recognizing symbol/logo, awareness of specifications, country-of-origin, well-known and globally known brands are important determinants of brand awareness for automotive brands. Hedonic brand image for automotive brands with regards to the findings revealed in this study refers to excellent value, reliable car brand, unique car brand, desirable car brand and increasing social approval. Meanwhile, functional brand image revolves around high and reliable performance for the engine, body and interior of automotive brands. Finally, brand sustainability includes economic maintenance, efficient fuel usage, environmentally safe, responsible, healthy and eco-friendly automotive brands. Invariably, these are the factors that consumers of automotive brands used in forming their perception and in shaping their mindset towards automotive brands.

In addition, the results of this study also revealed that the respondents in this study evaluate social media marketing communications content positively. As demonstrated in

the descriptive findings, the two tiers of social media marketing communications; FCCs and UGC were shown to be relevant and accessible to consumers on various types of social media. In specifics, the results showed that respondents consider social media advertising as a source of useful, credible, creative, different, original and persuasive information and campaigns. Similarly, social media promotions is regarded as the means of announcing and sharing promotions, product trials, price deals, gifts, discounts, rebates, coupons and service deals on social media. Furthermore, social media interactive marketing messages are regarded as contents which are used to raise brand image, increase brand awareness, link brand website, exchange opinions and evoke sales. Meanwhile, social media word-of-mouth was evaluated as both positive and negative comments and reviews which are posted by consumers to help, encourage and recommend them to make confident decisions. Finally, the results indicated that consumer response include; possibility of recommending a brand to others, commitment to purchase a brand, loyalty to a brand and considering the purchase of a brand as first choice.

With regards to the objectives of the study, this study found mixed findings with regards to the relationships between FCCs, UGC, CBBE of automotive brands and consumer response. In specifics, social media advertising, social media promotions and social media word-of-mouth have significant and positive relationships with CBBE of automotive brands. Similarly, CBBE of automotive brands, social media promotions and social media interactive marketing have significant and positive relationships with consumer response. Meanwhile, the relationships between social media interactive marketing and CBBE of automotive brands, social media advertising, social media

interactive marketing and consumer response are found to be significant but negative. Furthermore, CBBE is found to have significant indirect effect on the relationships between social media marketing communications and consumer response. The theoretical and practical implications of these findings are discussed in the following sections.

5.2 Discussions

This section presents the discussions of the findings in relation to the theoretical framework proposed in this study and in line with its research objectives. As such, the following subheadings represent individual objectives of this research with regards to the implications of each finding.

5.2.1 Direct Relationships between Social Media Marketing Communications and Consumer-Based Brand Equity of Automotive Brands

The first research objective is to examine the relationships between social media marketing communications and CBBE of automotive brands. As such, this study examined the direct relationships between social media advertising, social media promotions, social media interactive marketing, social media word-of-mouth and CBBE of automotive brands. The results of these relationships as tested and reported in the penultimate chapter are discussed individually in the following sub-headings.

5.2.1.1 Direct Relationship between Social Media Advertising and Consumer-Based Brand Equity of Automotive Brands

The findings presented in this study reveal that the relationship between social media advertising and CBBE of automotive brands is significant and positive. This relationship implies that the advertisements hosted on social media platforms by brand managers and brand owners are important marketing communications for enhancing the acceptance of CBBE of automotive brands. Hence, the useful, credible, creative, unique, original and persuasive information and contents that are posted on social media platforms such as; *Facebook, YouTube, Instagram* and *Twitter* proved to enhance positive perception and increased acceptance of automotive brands. In other words, the more advertising contents consumers see on social media platforms the more it is likely for their awareness of automotive brands to be increased. Also, the more their mindsets and perceptions are shaped positively and favorably towards the hedonic, functional and sustainability attributes of automotive brands.

The findings of this study are consistent with the findings of previous researchers who have examined the relationship of advertising and CBBE. For instance, studies such as; Bravo Gil, Fraj Andrés and Martinez Salinas (2007) and Yoo et al. (2000) have demonstrated that high spending on advertising increases CBBE among consumers. More relatedly, Okazaki and Taylor (2013) and Cortés and Article (2009) noted that advertising is used to build additional value for brands. The importance of advertising on CBBE has been hinted by Yoo et al. (2000), who argued that the more consumers see the advertisements of brands, the higher the chances that the brand will stick to consumers' minds and memories.

Corroboratively, the results of this study evinced the importance of advertisements that are disseminated through social media platforms are crucial for improving brand equity of automotive brands. This is so because, if social media advertising is able to impact positive and favorable attitudes on consumers through their evaluations of advertising contents that are posted on social media, subsequently, their perceptions of the automotive brands will be positive and favorable (Chi, 2011; Okazaki & Taylor, 2013). Hence, brand awareness, hedonic brand image, functional brand image and brand sustainability of automotive brands can be increased through the creative, original, credible and useful information that are disseminated as advertisements on social media platforms.

5.2.1.2 Direct Relationship between Social Media Promotion and CBBE of Automotive Brands

The findings of this study demonstrated that the relationship between promotions and CBBE of automotive brands is significant and positive. This result can be interpreted as thus; the promotional information that are disseminated on social media platforms are important in developing successful brand equity for automotive brands. In specifics, the promotional announcements, product trials, price deals, gifts, discounts, rebates, coupons and service deals that are shared on social media all have positive implications on the acceptance of automotive CBBE.

Additionally the results of this study imply that promotional information such as test drives, rebates/discounts, service trials and coupons that are disseminated on social media platforms have important implications on the development of brand equity of

CBBE. This study led credence to the theoretical argument of CSRM by demonstrating that, social media promotion as a form of short-term marketing mix (Valette-Florence et al., 2011) under market stimuli which is responsible for instigating positive perceptions of brands in consumers' black box (mindset) (Kotler & Keller, 2012).

In furtherance, the findings of this study also advanced the importance of social media platforms in developing and enhancing brand equity with regards to disseminating marketing communications and particularly promotional information, relying on the argument proffered by Okazaki and Taylor (2013) that the increasing popularity of social media platforms has increased the dissemination of promotional information among consumers. This study therefore confirms that the promotional information that are devolved by firms on social media have positive implications on the development of brand equity of automotive brands.

A number of prior researchers have demonstrated a negative association between sales promotion and brand equity. The justification proffered for their findings is that promotional information might instigate negative image and thoughts such as; low quality, cheap and fake on brand equity in consumers' mind (Winer, 1986; Martínez et al., 2009; Yoo et al., 2000; Valette-Florence, Guizani, & Merunka, 2011). Such image and thoughts are indeed contradictory to what the concept of brand equity stands for. However, in contrast to such argument, the result of this study affirmed that, the promotional information and contents that are posted on social media improve the awareness, evoke positive images of hedonic, functional and sustainability attributes of automotive brands. The result of this study in this regard is consistent with the findings

documented by previous researchers such as; Villarejo-Ramos and Sánchez-Franco (2005), Martínez et al. (2009), Joseph and Sivakumaran (2009), Shen and Bissell (2013) and Taecharungroj (2016) have similarly demonstrated that promotions have significant and positive influence on brand equity.

5.2.1.3 Direct Relationship between Social Media Interactive Marketing and CBBE of Automotive Brands

The findings of this study demonstrate that social media interactive marketing has a significant relationship with CBBE of automotive brands. However, this finding evinced that interactive marketing has a negative implication on brand equity. The findings of this study imply that the interactive marketing contents have meaningless relationships with the development of brand equity of automotive brands. Invariably, interactive marketing contents do not increase brand awareness, do not raise hedonic and functional brand images and sustainability.

Previous researchers have argued that interactive marketing has been one of the most common marketing communications disseminated by brand owners and brand managers on social media platforms (Keller, 2010; Shankar & Balasubramanian, 2009). Even though not very much studies have explored the influence of interactive marketing on brand equity (Mirabi et al., 2015), the findings of this study advanced that social media interactive marketing has a reverse implication on CBBE.

5.2.1.4 Direct Relationship between Social Media Word-of-Mouth and CBBE of Automotive Brands

The findings of this study revealed that there is a significant relationship between social media word-of-mouth and CBBE of automotive brands. This result implies that the comments, consumer reviews and consumer experiences shared on social media platforms encourage other consumers to make favorable and confident decisions about automotive brands. Subsequently, due to the comments and reviews that are shared on social media, these improve the acceptance and development of brand equity of automotive brands.

The findings are in line with previous research, which have demonstrated the importance of word-of-mouth to successful brand equity (Goldsmith & Horowitz, 2006; Trusov, Bucklin, & Pauwels, 2009; Eisingerich, Chun, Liu, Jia, & Bell, 2014; Wolny & Mueller, 2013). Similarly, previous studies on social media communications have also indicated that the involvement of consumers in brand-related narratives on social media has been increasingly orchestrated through word-of-mouth. Subsequently, consumers' word-of-mouth on social media platforms play an important role in the development and enhancement of successful brand equity (Muntinga, Moorman, & Smit, 2011; Christodoulides et al., 2012; Schivinski et al., 2016).

5.2.2 Direct Relationships between Social Media Marketing Communications and Consumer Response

The third objective of this research is to examine the direct relationships between social media marketing communications and consumer response. As such, this study

determines the differential relationship between social media advertising, social media promotion, social media interactive marketing, social media word-of-mouth and consumer response. The result of these relationships are discussed in the following sub-headings.

5.2.2.1 Direct Relationship between Social Media Advertising and Consumer Response

The findings reported in this study evinced that there is a significant relationship between social media advertising and consumer response. However, the relationship between advertising on social media and consumer response was found to be negative. This implies that the useful, creative, original and credible information that are disseminated through social media platforms do not yield favorable responses in terms of commitment, loyalty and preference to purchase automotive brands from consumers.

The result of this study is apparently contrary to previous research such as; Buil, de Chernatony, et al. (2013) and Ghorban (2012), who found that advertising is an effective tool which is useful for increasing customers' loyalty, creating brand awareness and reinforcing other brand-related associations and attitudes. The reason for the negative relationship reported in this study might be because the study was conducted among automotive consumers. Hence, social media advertising might not be enough to evoke favorable responses from consumers in the context of high-involvement products like automobiles, most especially because brand preferences and brand purchase intentions were used to reflect consumer response in this study.

5.2.2.2 Direct Relationship between Social Media Promotion and Consumer Response

The relationship between social media promotion and consumer response was found to be significant in this study. This result imply that, the monetary promotion in terms rebate/discounts and non-monetary for example service trial and coupons are used to evoke favorable responses and attitudes in terms of purchase intention and brand preference from the consumers of automotive brands.

The result of this study in line with previous researchers who have consistently demonstrated that, promotion is usually in form of promotional incentives which include price deals that are deployed on social media to evoke purchase and or product trials (Keller, 2009; Nijs et al., 2001; Leeflanf & Parreno-Selva, 2012). This present research therefore, provide an empirical evidence to this notion by demonstrating that, the more promotional information disseminated on social media platforms the higher the possibility of evoking positive and favorable responses from consumers of automotive brands.

5.2.2.3 Direct Relationship between Social Media Interactive Marketing and Consumer Response

The relationship between social media interactive marketing and consumer response was revealed to be significant. However, the relationship between social media interactive marketing and consumer response demonstrated a negative character, indicating that the more interactive marketing contents disseminated on social media, the less response in terms of purchase intention and brand preference evoked from

consumers. Therefore, this result indicates that social media interactive marketing does not yield favorable consumer response to automotive brands.

This result is quite contrary to those of previous researchers such as; Bruhn et al., (2012) and Khadim et al., (2014), who have demonstrated that consumers' evaluations of interactive content on social media lead to brand purchase intention. The difference between the finding of this study with regards to the relationship between interactive marketing and consumer response might be indicative of the difference between operationalization of social media interactive marketing and consumer response, as well as the context in which this research was conducted. Social media interactive marketing was operationalized as the types of content which are used to increase brand image, brand awareness and brand website linkage. However, consumer response was operationalized as purchase intention and brand preference. In other words, the more content posted on social media which are related to brand image and brand awareness, the less purchase intention and brand preference are evoked from consumers of automotive brands.

5.2.2.4 Direct Relationship between Social Media Word-of-Mouth and Consumer Response

The result presented in this study revealed the relationship between social media word-of-mouth and consumer response. The result implies that consumers' reviews and comments on social media platforms yield favorable responses in terms of brand preference and purchase intention. The result of this study revealed the importance of

social media word-of-mouth, especially with regards to evoking positive responses of consumers of automotive brands.

The results of this study are consistent with findings of previous studies, which have revealed the association between word-of-mouth on social media platforms and consumer response (Bruhn et al., 2012; Christodoulides et al., 2012; Jalilvand & Samiei, 2012; Kim & Ko, 2012; Zailskaite-jakste & Kuvykaite, 2012). Therefore, the result of this study implies that social media word-of-mouth is an important marketing communication type for enhancing responses of consumers of automotive brands.

Furthermore, this study provides an empirical justification for the notion that UGCs are crucial for enhancing consumers' connections and engagements with brands. Furthermore, consumers' comments, experiences and personal reviews of brands that are often posted on brand social media pages have significant influence on other consumers' behaviors and perceptions of brands (Gensler et al., 2013), as well as their preferences in automotive brand selection.

5.2.3 Direct Relationships between Consumer-Based Brand Equity automotive brands and Consumer Response

The direct relationship between CBBE of automotive brands and consumer response was found to be significant in this study. The result of this study implies that CBBE in terms of brand awareness, hedonic brand image, and functional brand image and brand sustainability is important for stimulating favorable consumer response. In other words, this result indicates that when consumers have high brand awareness, positive hedonic

brand image, functional brand image and brand sustainability, consumers' responses in terms of purchase intention and brand preference of automotive brands will be positive.

Previous studies have similarly demonstrated that CBBE is related to consumers' behaviors in terms of brand purchase intention and consumers' attitudes with regards to brand preferences (Chang & Liu, 2009; Chen & Chang, 2008; Moradi & Zarei, 2011; Tolba & Hassan, 2009; Vinh & Huy, 2016). Consistently, the results of this study reveal that the importance of CBBE for automotive brands is to enhance consumers' responses in terms of brand purchase intention and preference.

Additionally, the results of this study also conform to the conception and measurement of brand equity. According to Keller (2001), the CBBE model is the reflection of consumers' mindsets, experiences and perceptions, which are expected to enhance and influence consumers' attitudes and behaviors towards the acceptance and selection of brands. In line with this notion, the result of this study demonstrated that the perceptions and mindsets of automotive consumers in terms of brand awareness, hedonic brand image, and functional brand image and brand sustainability will yield positive responses in terms of brand purchase intentions and preferences.

5.2.4 Indirect Relationship of Consumer-Based Brand Equity

The fourth and the last objective of this research is to examine the indirect effect of CBBE on the relationships between social media marketing communications and consumer response. As such, the indirect effect of CBBE on the relationships between

social media advertising, social media promotion, social media interactive marketing and social media word-of-mouth are discussed in the following subsections.

5.2.4.1 Indirect Effect of Consumer-Based Brand Equity on the Relationship between Social Media Advertising and Consumer Response

The result presented in this study revealed that, there is a partial mediation of CBBE on the relationship between social media advertising and consumer response. This implied that, consumers' attitude towards advertising appeals and information on social media work through their own perception towards the attributes of automotive brands to enhance their response in terms of purchase and preference. This study imply that, CBBE of automotive brands indirectly influence the effect of social media advertising on consumer response. According to this finding, brand managers should focus on building positive and favorable associations with their brands through their engagements with consumers on social media platforms in order to increase and enhance more favorable response from their consumers.

Even though many studies in the realm social media have not really focused on the mediating effect of CBBE on the relationship between social media communication and consumer response, this particular result is in line with that of Schivinski and Dabrowski (2014) who found that, FCC have an indirect influence on consumers' behavior. Social media advertising being one of the most identifiable types of FCC, this research concurred that, when brand managers maintained the deployment of social media advertising for the purpose of creating awareness and improving image of their brands (Keller, 2009), it will evokes expected responses to the advertisements from the

consumers. Furthermore, the findings of this research elaborates on the importance of CBBE dimensions as the accentuating factors to the effect of advertising on consumers' responses and behavioral reactions. In other words, the indirect effect of CBBE on the relationship between social media advertising and consumer response implied that, consumers' would likely respond and react favorably to social media advertising of a successful brand (Kotler & Armstrong, 2008).

5.2.4.2 Indirect Effect of CBBE on the Relationship between Social Media Promotion and Consumer Response

The result presented in this study demonstrates that, CBBE of automotive brands has a significant indirect effect on the relationship between social media promotion and consumer response. The implication of this findings is that, CBBE indirectly influence the influence of promotional gimmicks such as; discounts, prince deals, offering coupons and service deals on consumer response. This result is somewhat surprisingly, considering the level at which some previous studies (e.g: Villarejo-Ramos & Sánchez-Franco, 2005; Yoo et al., 2000; Nikabadi et al., 2015) argued against sales promotion as a strategic tool for building and developing CBBE. The logic behind such assertions was that the primary essence of developing brand equity is to strategically influence consumers to pay premium price, hence, if a product has favorable and successful brand equity, there should be no need for employing sales promotions such as price deals (Agarwal & Teas, 2002). This is because consumers use the price factor as the basis for judging product quality and when there are price deals, discounts and rebates consumers might think of the brand as low in quality.

However, this result of this present study has proven otherwise, that, social media promotion is capable of evoking favorable attitude and perception towards brand which can indirectly enhance consumers' behavioral reactions and response in terms of purchase intention and brand preference. In other words, this result suggests that, the promotional activities that are anchored on social media pages of brands are influenced by the consumers' perceptions, associations and awareness towards the hedonic, functional and sustainability attributes of the brands and these CBBE influence can be reflected in consumer response in terms of purchase intention and brand preference. This result therefore, provides an insight to brand managers and marketers not to reinforce on their efforts on in using social media promotion as the strategy for evoking favorable response from consumers through the development and management of CBBE.

5.2.4.3 Indirect Effect of CBBE on the Relationship between Social Media Interactive Marketing and Consumer Response

The indirect effect of CBBE was examined on the relationship between social media interactive marketing and consumer response. The result revealed that, CBBE has a significant mediation effect on the relationship between social media interactive marketing and consumer response. As evidenced during the reporting of the mediation result, the direct effect of social media interactive marketing with and without was negatively strong. Implying that, social media interactive marketing does not have a meaningful implication on consumer response.

However, the introduction of CBBE as a mediating variable reduces the effect near zero. The implication of the indirect effect of CBBE in this study is that, even if social media interactive marketing has not proven to be impactful on consumer response brand managers might divert the efforts of interactive marketing on social media towards developing CBBE. This is a considerable suggestion especially because theorists such as Keller (2009) believed that, interactive marketing are used for increasing awareness and images of a brand.

5.2.4.4 Indirect Effect of CBBE on the Relationship between Social Media Word-of-Mouth and Consumer Response

The indirect effect of CBBE is also examined on the relationship between social media word-of-mouth and consumer response in this research. The result presented yielded a strong and significant indirect effect of CBBE on the relationship between social media word-of-mouth and consumer response. This result imply that, consumers' mindset towards CBBE dimensions such as brand awareness, hedonic brand image and functional brand image collectively have indirect effect in explaining the effect of word-of-mouths that are disseminated on social media on the behavioral reactions of consumers.

This result highlights the importance of CBBE as one of the reason why consumers participate in word-of-mouth and react to the claims and reviews that are posted on social media by other users. When consumers have interest in a brand, they will actively get involved word-of-mouth on social media and believed the information that are posted by other consumers (Pornpitakpan 2004). Therefore, consumers' perceptions and

associations with the dimensions of CBBE such as; brand awareness, hedonic brand image and functional brand image will further heightened the impact of social media word-of-mouth on consumer response.

According to this findings, brand managers must learn the tactics for managing consumers' comments, reviews and discussions on their social media pages in a way that will be favorable to the development and success of their CBBE (Mangold & Faulds, 2009). This is important especially because social media offers consumers an extremely free environment where both positive and negative WOM can be posted and tagged with any brand. As depicted in Figure 2.4 (Page, 88) brand managers might not be able prevent consumers' from posting or commenting negative WOM on their social media pages and platforms (Ward & Ostrom 2006; Bambauer-Sachse & Mangold 2011; Sen & Lerman 2007). However, brand managers must not let negative WOM on social media to linger for too long before providing convincing feedbacks and response.

5.3 Implications of the Study

Based on the findings presented in this study, the implications of this research in line with the gaps highlighted in the problem statements, the CSRM theoretical perspective and methodological advancements. As such, the contributions of this study in relation to theory, method and practice are discussed in the following sections.

5.3.1 Theoretical Implications

With regards to the findings on the direct relationship between social media marketing communications on CBBE of automotive brands and consumer response, the results

presented in this research corroborate the teeming number of previous studies on social media communications by revealing that the advent of social media has brought about significant changes in the dissemination and reception of marketing communications, most especially by allowing the involvement of consumers in the co-creation of brand-related contents. The literature review indicates that previous studies mainly focused on consumers' evaluations of both FCC and UGC. However, the results of this study situate the brand-related content on social media in the realm of marketing communications. Therefore, the results of this study specify the differential role of social media marketing communications, including social media advertising, social media promotion, social media interactive marketing for FCC and social media word-of-mouth for UGC on CBBE.

Furthermore, the indirect effect of CBBE is reported in this study. This serve as one of the significant standouts of this research considering the fact that, not many studies on social media communications have explored similar objective. Furthermore, the mediation findings reported in this study reiterate the importance of CBBE in explaining the relationships between social media marketing communications and consumer response (Schivinski, 2014).

Additonally, the findings of both the direct and indirect relationships between social media marketing communications, CBBE of automotive brands and consumer response as depicted in Figure 5.1 provide an evidence for the CSRM. According to the theorists of the response model, there are four market stimuli - communication, market, environment and consumer characteristics - which determine the consumer's perception,

psychology and attitude (Belch & Belch, 2003). This study therefore streamlines the perspectives of CSRM by focusing on communication as one of the important marketing stimuli. Hence, the result of this research elaborates that, social media marketing communications are forms of marketing stimuli that are responsible for stimulating consumers' mental process for the creation of favorable perceptions and mindsets (CBBE) which influence their response (purchase intention and brand preference).

Additionally, this study also advance the discussion on the need for a context or industry-based CBBE model. This study therefore validates the CBBE concept in the automotive industry, in order to provide theoretical foundations for measuring CBBE in the context of the automotive industry. As such, this study affirms the definition of CBBE in the context of the automotive industry and explores dimensions that are specifically reflective of consumers' perceptions, experiences and associations with automotive brands. In relation to this, the findings of this study indicate that brand awareness, hedonic brand image, functional brand image and brand sustainability are specific dimensions of CBBE in the context of automotive brands. The validated CBBE scale is expected to guide future studies in measuring automotive CBBE.

This objective is motivated by the level at which extant studies have argued that the essence of measuring CBBE is to understand how consumers' perceptions and mindsets influence their responses, attitudes and behaviors towards brands (Boo et al., 2009). Meanwhile, consumers' perceptions of brands are not necessarily the same across industries, because different products serve different purposes and perform different functions. Similarly, consumers' judgments of brands' attributes are expected to differ.

For example, the things consumers consider very important in evaluating high-involvement products like automotive brands may not be the same with low-involvement brands. Therefore, in advancing the discussion on the consequences of developing CBBE in the context of automotive brands, the qualitative data presented in this study demonstrate that CBBE does not necessarily evoke purchase or re-purchase intentions among consumers. Rather, “preference”, “recommendation” “commitment to the brand”, “loyalty to the brand” and “referral” are specific implications of CBBE on automotive consumers. Therefore, this study validates consumer response in the context of automotive brands (Buil, Martínez, et al., 2013a).



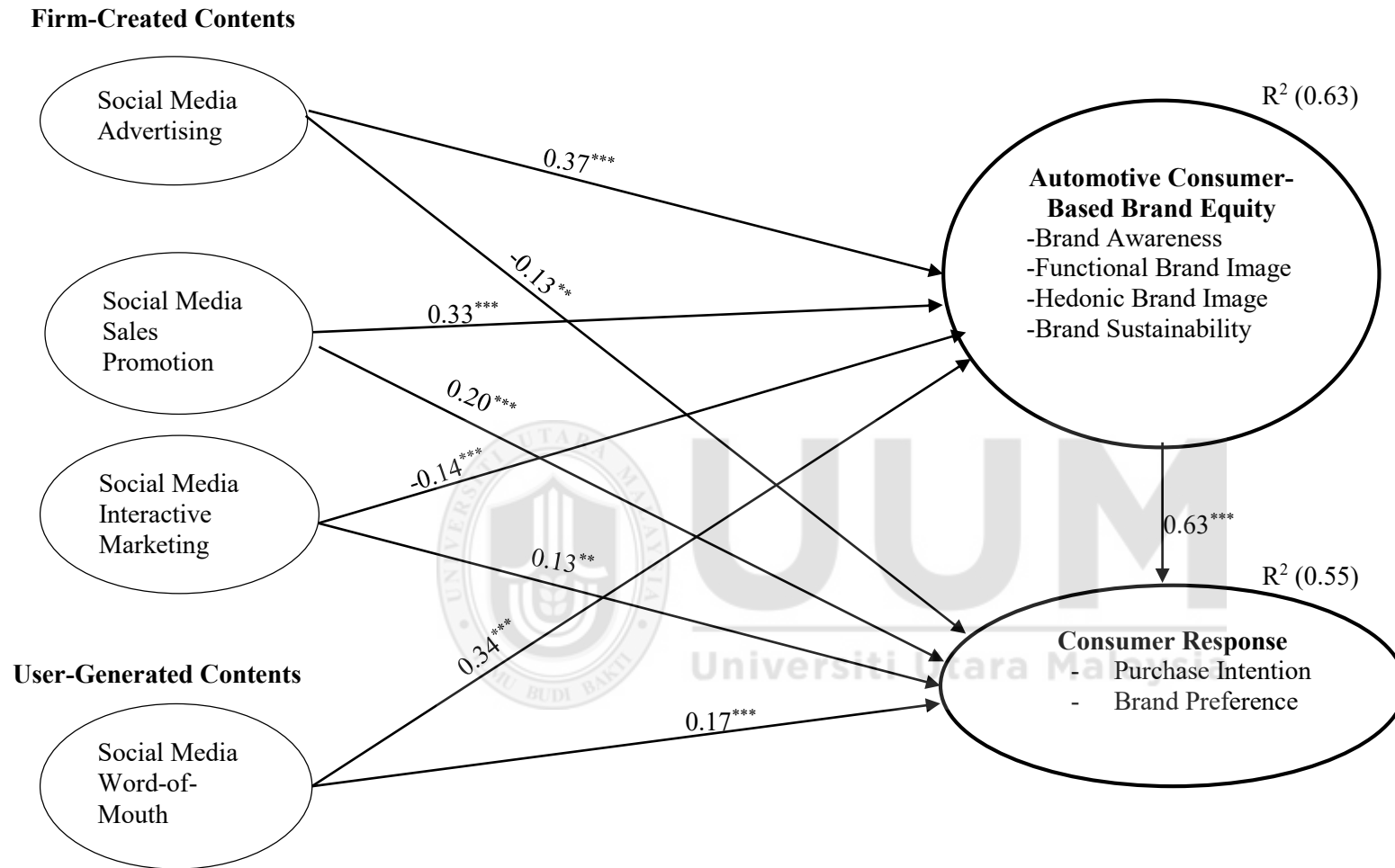


Figure 5.1. Validated Theoretical Framework

5.3.2 Methodological Implications

This study has some methodological implications, which include the use of the mixed-method approach. The qualitative method offers the researcher the opportunity to explore the opinions of automotive brands and users of social media, in order to provide specific measures for CBBE and social media marketing communications. Also, this method allows the researcher to purify the items adopted from literature in order suit the context of the study. Furthermore, the multi-level item development approach, which included 8 different stages of purifying and validating the items employed in this study to validate the CBBE, social media marketing communications and consumer response scales, yielded valid measurements that can be adopted by future researchers.

Additionally, the employment of the CB-SEM technique to analyze the model hypothesized in this study provides the opportunity of assessing the convergent validity, discriminant validity and nomological validity. These analyses do not just reveal the psychometric properties of the understudied variables, but also reveal the associations between the exogenous variables (social media advertising, social media promotions, social media interactive marketing and social media word-of-mouth) and the endogenous variables (CBBE of automotive brands and consumer response).

Finally, this study advanced the methodological approach commonly employed by previous social media communication researchers. It is common among previous studies to determine the association between social media, the development of CBBE and consumer behavior through consumers' evaluations of social media contents. These studies commonly discussed social media contents along the borders of FCC

and UGC. However, this study contributes to the realm of social media communication by specifying constructs for measuring FCC and UGC and developing valid scales which can be adopted by future researchers to measure social media marketing communications.

5.3.2 Practical Implications

Practically, the findings of this study are expected to provide insights for brand managers and brand owners, especially those managing automotive brands, on how to improve and enhance their brand equities and increase the acceptance of their brands. The findings of this study have specified the important components of CBBE for automotive brands; brand awareness, hedonic brand image and functional brand image. Therefore, brand managers, especially those managing automotive brands, can adjust their branding and communication activities to focus more on these important attributes in order to improve the acceptance and selection of their automotive brands.

CBBE models are measures of consumers' mindsets and perceptions. The practical implication of any CBBE model is to guide managers on how to capture the pockets of consumers by capturing their minds. Therefore, automotive brand managers are advised to pay more attention to their involvements and activities on social media by generating advertising and promotion contents in order to improve consumers' perceptions and acceptance of automotive brands. Also, brand managers are assisted to encourage more favorable and positive word-of-mouths on their social media platforms for the purpose of enhancing their brand equities.

Additionally, the findings presented in this study holistically provide important insights to brand managers and marketers on the limitless opportunities of enhancing brand equity and evoking favorable responses from consumers through social media. In specifics, this study evinced that social media advertising, social media promotions, social media interactive marketing and social media word-of-mouth are important marketing communications that can be used to evoke favorable responses from consumers. Thus, this study provides a basis to advise brand managers to further increase their engagements and involvements with consumers through social media platforms.

Another important practical implication of this research is that the results presented in this study provide an insight for brand and marketing managers to note that CBBE of automotive brands can be used to evoke favorable responses from consumers in terms of purchase intention and brand preference. On this basis, marketers and managers of automotive brands are advised to situate their focus on brand preferences and purchase intentions of consumers as the outcome of their branding activities.

5.4 Limitations of the Study

Even though this study has achieved all its highlighted objectives as common with many other scientific studies, this research is not without certain limitations. As such, the limitations of this study are discussed as follows:

Firstly, the limitation of this study is like its research design being a cross-sectional method using survey design. Due to the use of the cross-sectional survey approach, the findings of this research are based on primary data. Thus the study only relies on the opinions and perceptions of respondents in measuring CBBE, social media marketing communications and consumer response.

Secondly, this study explores the validity of the CBBE concept in the context of automotive brands from the perspectives of consumers and brand managers by conducting semi-structured interviews among automotive brand managers and users and social media users. However, the authors could not compare and contrast the opinions of the informants.

Thirdly, there is a level of limitation in generalizing the findings of this study. This is because this study employs a cluster sampling technique by selecting one city from each of the five regions across Malaysia. Subsequently, this might provide an inadequate representation of automotive brand users from the states in Malaysia.

Fourthly, the model of CBBE validated for automotive brands in this study only accommodates the brand elements, functional and hedonic attributes and sustainability image of passengers car brands. Thus the model mirrors the consumer's mindset for passenger cars only and not luxurious and commercial vehicles.

Finally, following the review of previous studies, it has been consistently reported that advertising is one important marketing communication which has a positive

relationship with brand equity and consumer behavior. However, the findings reported in this study could not establish a meaningful relationship between social media advertising, social media interactive marketing and consumer response.

5.5 Recommendations for Future Study

By the limitations listed above, this section presents important recommendations for future researchers. Firstly, future researchers are recommended to employ secondary data, which allows them to examine the antecedent factors and consequences of CBBE using secondary data, especially financial data from organizations.

Furthermore, future researchers are charged to focus on the comparison between the involvement of brand managers and consumers vis-à-vis their roles in developing and enhancing CBBE and consumer response. Additionally, future researchers might consider comparing between industries as an attempt to advance the universality of the CBBE concept across industries. Additionally, future researchers might want to consider validating the CBBE model for luxurious and commercial automotive brands.

This study could not demonstrate a meaningful relationship between social media advertising, social media interactive marketing and consumer response. Subsequently, future studies may consider examining the role of advertising and interactive marketing on other dimensions of consumer attitude and behavior.

5.6 Conclusions

This study conducted semi-structured interviews to validate the concept of CBBE in the context of automotive brands. This study also examined the role of social media marketing communications in developing CBBE and the implications of CBBE on consumer response. This study also examined the indirect effect of CBBE on the relationships between social media communications and consumer response. This research concludes that CBBE is a valid concept in the context of automotive brands. The important factors or dimensions that reflect CBBE in the context of automotive brands are brand awareness, functional brand image, hedonic brand image and brand sustainability.

Furthermore, this study demonstrates that brand-related content that is deployed by both firms/brand owners and consumers on social media cut across different marketing communications, which include advertising, sales promotions, interactive marketing and word-of-mouth. This study relies on previous marketing communications, brand equity studies and the theoretical perspectives of CSRM to hypothesize the direct relationships between social media marketing communications, CBBE and consumer response. These marketing communications were found to have significant relationships with CBBE of automotive brands and consumer response. On this basis, the findings of this study supported the entire hypotheses formulated in this study. However, the relationship between social media advertising and CBBE, social media advertising, social media interactive marketing and consumer response were found to be negative. Furthermore, CBBE demonstrates

significant indirect effects on the relationships between social media marketing communications and CBBE.

Conclusively, this study extended the concept of CBBE in the automotive context by validating the CBBE model, which measures explicitly consumers' associations, perceptions and experiences with automotive brands through brand awareness, hedonic brand image, functional brand image and brand sustainability. Also, this study situates the two tiers of social media communication; FCC and UGC into marketing communications by validating the measures of social media advertising, social media promotions, social media interactive marketing and social media word-of-mouth. Thus, this study was able to discern the differential roles of these social media marketing communications on the development of CBBE and consumer response. Furthermore, CBBE was demonstrated to have significant impacts on consumer responses.

In general, this study demonstrates that CBBE can be developed through marketing activities that are devolved on social media platforms. Also, the findings of this study demonstrate that social media is an important channel for developing CBBE. The findings of this study are in line with those of previous researchers (Schivinski 2011; Tsai and Me 2013; Hamid et al. 2013; Berthon, Pitt, McCarthy, and Kates 2007), who has revealed that social media is embedded with potentials for influencing users' perceptions, behaviors and responses. In other words, social media, including *Facebook*, *Twitter* and *YouTube* are strategic channels for disseminating effective and interactive dialogic, brand-related communications between brand managers and consumers.

Furthermore, considering the viral usage of social media as a marketing communications channel by brand managers, the findings of this study help to understand the impact of interactions between companies, consumers and brands on brand management. Furthermore, the consequences of consumer perception and their behavioral responses to social media communication efforts are also demonstrated in this study. Interestingly, this study found that social media platforms will continue to be an influential channel for disseminating marketing communications across industries in Malaysia. This is because the findings in this study evinced that, Malaysians across different demographic categorization of age, gender, race and religion have a substantial presence on social media and to engage with commercial brands on different social media platforms such as *Facebook*, *Twitter*, *Blogs* and *YouTube* (Soeialbakers, 2015). The Malaysian Communication and Multimedia Commission (MCMC) (2009) buttressed that social media is an important phenomenon for studying the Malaysian public as consumers. Conclusively, social media marketing communications are important marketing strategy for enhancing brand equity and consumer response among Malaysians.

REFERENCES

- Aaker, D. a. (1991). Managing Brand Equity. *Journal of Marketing*, 56(2), 125.
<http://doi.org/10.2307/1252048>
- Abd Jalil, K. (2010). Social Media and the practice of Public Relations in Malaysia: Where do we stand? In *International Conference on Communication and Media 2010 (i.COME'10)*, 1–17. Melaka.
- Abedniya, A., & Mahmoudi, S. S. (2010). The Impact of Social Networking Websites to Facilitate the Effectiveness of Viral Marketing. *International Journal of Advanced Computer Science and Applications*, 1(6), 139–146.
- Abzari, M., Ghassemi, R. A., & Vosta, L. N. (2014). Analysing the Effect of Social Media on Brand Attitude and Purchase Intention: The Case of Iran Khodro Company. *Procedia - Social and Behavioral Sciences*, 143, 822–826.
<http://doi.org/10.1016/j.sbspro.2014.07.483>
- Agarwal, S., & Teas, R. K. (2002). Cross-national applicability of a perceived quality model. *Journal of Product & Brand Management*, 11(4), 213–236.
<http://doi.org/10.1108/10610420210435425>
- Ailawadi, K., Lehmann, D., & Neslin, S. (2003). Revenue Premium as an Outcome Measure of Brand Equity. *Journal of Marketing*, 67(4), 1–17.
<http://doi.org/10.1509/jmkg.67.4.1.18688>
- Alam, M. S., & Anis, M. S. (2016). Customer purchasing decisions and brand equity: a study on Multi- Utility – Vehicles (MUV) in uttar pradesh india. *International Journal of Economic Research*, 13(3), 1267–1281.
- Alhaddad, A. A. (2015). The Effect of Advertising Awareness on Brand Equity in Social Media. *International Journal of E-Education, E-Business, E-Management and E-Learning*, 5(2), 73–84.
<http://doi.org/10.17706/ijeeee.2015.5.2.73-84>
- Anselmsson, J., Bondesson, N. V., & Johansson, U. (2014). Brand image and customers' willingness to pay a price premium for food brands. *Journal of Product & Brand Management*, 23(2), 90–102. <http://doi.org/10.1108/JPBM-10-2013-0414>
- Baalbaki, S., & Guzmán, F. (2016). A consumer-perceived consumer-based brand equity scale. *Journal of Brand Management*, 23(3), 229–251.
<http://doi.org/10.1057/bm.2016.11>
- Babbie, E. (2012). *The Practice of Social Research*. Retrieved from <http://books.google.com/books?id=-YoJAAAAQBAJ&pgis=1>
- Bakshi, M., & Mishra, P. (2016). Structural equation modelling of determinants of

- consumer-based brand equity of newspapers. *Journal of Media Business Studies*, 13(2), 73–94. <http://doi.org/10.1080/16522354.2016.1145912>
- Bambauer-Sachse, S., & Mangold, S. (2011). Brand equity dilution through negative online word-of-mouth communication. *Journal of Retailing and Consumer Services*, 18(1), 38–45. <http://doi.org/10.1016/j.jretconser.2010.09.003>
- Bartholme, R. H. & Melewar, T. C. (2014). The end of silence? Qualitative findings on corporate auditory identity from the UK. *Journal of Marketing Communications*, 22(4), 49-436.
- Batra, R., & Homer, P. M. (2004). The Situational Impact of Brand Image Beliefs. *Journal of Consumer Psychology*, 14(3), 318–330. http://doi.org/10.1207/s15327663jcp1403_12
- Belch, G. E., & Belch, M. A. (2003). Advertising and promotion: an integrated marketing communications perspective. *Learning*, 4th, 668. <http://doi.org/10.1007/s13398-014-0173-7.2>
- Berthon, P. R., Pitt, L. F., McCarthy, I., & Kates, S. M. (2007). When customers get clever: Managerial approaches to dealing with creative consumers. *Business Horizons*, 50(1), 39–47. <http://doi.org/10.1016/j.bushor.2006.05.005>
- Berthon, P. R., Pitt, L. F., Plangger, K., & Shapiro, D. (2012). Marketing meets Web 2.0, social media, and creative consumers: Implications for international marketing strategy. *Business Horizons*, 55(3), 261–271. <http://doi.org/10.1016/j.bushor.2012.01.007>
- Boateng, H., & Okoe, A. F. (2015). Consumers' attitude towards social media advertising and their behavioural response: The moderating role of corporate reputation. *Journal of Research in Interactive Marketing*, 9(4), 299–312. <http://doi.org/http://dx.doi.org/10.1108/JEIM-07-2014-0077>
- Bonhommer, J., Christodoulides, G., & Jevons, C. (2010). The impact of user-generated content on consumer-based brand equity. In *9th Thought Leaders International Conference on Brand Management* (Vol. 61, pp. 0–16).
- Boo, S., Busser, J., & Baloglu, S. (2009). A model of customer-based brand equity and its application to multiple destinations. *Tourism Management*, 30(2), 219–231. <http://doi.org/10.1016/j.tourman.2008.06.003>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology., 3:2 (2006), 77-101. *Qualitative Research in Psychology*, 3, 77–101. <http://doi.org/10.1191/1478088706qp063oa>
- Bravo Gil, R., Fraj Andrés, E., & Martinez Salinas, E. (2007). Family as a Source of Consumer-Based Brand Equity. *Journal of Product & Brand Management*, 16(3), 188–199. <http://doi.org/10.1108/10610420710751564>

- Broniarczyk, S. M., & Gershoff, A. D. (2003). The reciprocal effects of brand equity and trivial attributes. *Journal of Marketing Research*, 40(2), 161–175. <http://doi.org/10.1509/jmkr.40.2.161.19222>
- Bronner, F., & Neijens, P. (2006). Audience experiences of media context and embedded advertising: A comparison of eight media. *International Journal of Market Research*, 48(1), 81–100. <http://doi.org/Article>
- Brown, C. L., & Carpenter, G. S. (2000). Why Is the trivial important? A reasons-based account for the effects of trivial attributes on choice. *Journal of Consumer Research*, 26(4), 372–385. <http://doi.org/10.1086/209569>
- Bruhn, M., Schoenmueller, V., & Schafer, D. B. (2012). Are social media replacing traditional media in terms of brand equity creation? *Management Research Review*, 35(9), 770–790.
- Brunello, A. (2015). Brand Equity in Premium Car Market. *International Journal of Communication Research*, 5(2), 128–135.
- Bryman, A., & Bell, E. (2007). *Business Research Methods. Social Research*. <http://doi.org/10.4135/9780857028044>
- Buil, I., de Chernatony, L., & Martínez, E. (2013). Examining the role of advertising and sales promotions in brand equity creation. *Journal of Business Research*, 66(1), 115–122. <http://doi.org/10.1016/j.jbusres.2011.07.030>
- Buil, I., Martínez, E., & Chernatony, L. De. (2013a). The influence of brand equity on consumer responses. *Journal of Consumer Marketing*, 30(1), 62–74. <http://doi.org/10.1108/07363761311290849>
- Buil, I., Martínez, E., & Chernatony, L. De. (2013b). The influence of brand equity on consumer responses. *Journal of Consumer Marketing*, 30(1), 62–74. <http://doi.org/10.1108/07363761311290849>
- Burmann, C. & Arnhold, U. (2008). *User Generated Branding: State of the Art Research*. (Vol 8), Berlin: Christoph Burmann.
- Burton, S., & Soboleva, A. (2011). Interactive or reactive? Marketing with Twitter. *Journal of Consumer Marketing*, 28(7), 491–499. <http://doi.org/10.1108/07363761111181473>
- Bushelow, E. E. (2012). Facebook Pages and Benefits to Brands. *The Elon Journal of Undergraduate Research in Communications*, 3(December 2011), 5–20.
- Byrne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming* (Second Edi). London: Taylor & Francis Group, LLC. <http://doi.org/10.4324/9781410600219>
- Campbell, M. C. (2002). Building brand equity. *International Journal of Medical*

Marketing, 3(2), 208–218. Retrieved from
http://213.8.137.125/shivuk/shivuk_new/3b.pdf

Champoux, V., Durgee, J., & McGlynn, L. (2012). Corporate Facebook pages: when “fans” attack. *Journal of Business Strategy*, 33(2), 22–30.
<http://doi.org/10.1108/02756661211206717>

Chandon, P. (2003). *Note on measuring brand awareness, brand image, brand equity and brand value. Faculty and Research.*

Chandon, P., Wansink, B., & Laurent, G. (2000). A benefit congruency framework of sales promotion effectiveness.pdf. *Journal of Marketing*, 64, 65–81.

Chang, H. H., & Liu, Y. M. (2009). The impact of brand equity on brand preference and purchase intentions in the service industries. *The Service Industries Journal*, 29(12), 1687–1706. <http://doi.org/10.1080/02642060902793557>

Chattopadhyay, T., Dutta, R. N., & Sivani, S. (2010). Media mix elements affecting brand equity: A study of the Indian passenger car market. *IIMB Management Review*, 22(4), 173–185. <http://doi.org/10.1016/j.iimb.2010.09.001>

Chattopadhyay, T., Shivani, S., & Krishnan, M. (2009). Determinants of brand equity - A blue print for building strong brand : A study of automobile segment in India. *African Journal of Marketing Management*, 1(4), 109–121.

Chedi, C. R. (2008). The influence of brand preference on brand image transfer: A research on brand event congruity in sponsorships. *Unpublished MSc Thesis*, 1–30.

Chen, C. F., & Chang, Y. Y. (2008). Airline brand equity, brand preference, and purchase intentions-The moderating effects of switching costs. *Journal of Air Transport Management*, 14(1), 40–42.
<http://doi.org/10.1016/j.jairtraman.2007.11.003>

Chen, Y., Fay, S., & Wang, Q. (2011). The role of marketing in social media: how online consumer reviews evolve. *Journal of Interactive Marketing*, 25(2), 85–94. <http://doi.org/10.1016/j.intmar.2011.01.003>

Cheryl Burke Jarvis, Scott B. MacKenzie, Philip M. Podsakoff, Jarvis, C. B., MacKenzie, S. B., Podsakoff, P. M., ... Philip M. Podsakoff. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research*, 30(2), 199–218. <http://doi.org/10.1086/376806>

Chi, H. (2011). Interactive digital advertising vs. virtual brand community. *Journal of Interactive Advertising*, 12(1), 44–61.
<http://doi.org/10.1080/15252019.2011.10722190>

Chieng, F. Y. L., & Lee, G. C. (2011). Customer-based brand equity : a literature

- review. *Journal of Arts Science & Commerce*, 2, 33–42.
- Chin, W. W. (1998). Commentary: Issues and opinion on structural equation modeling. *MIS Quarterly*, 22(1), 1. <http://doi.org/Editorial>
- Chiu, Y., Yin, S. S., & Jessica, H. (2015). Local vs. global brands: country-of-origin's effect on consumer-based brand equity among status-seekers. *Journal of Economics and Behavioral Studies*, 7(3), 6–13.
- Chovanová, H. H., Korshunov, A. I., & Babčanová, D. (2015). Impact of brand on consumer behavior. *Procedia Economics and Finance*, 34(15), 615–621. [http://doi.org/10.1016/S2212-5671\(15\)01676-7](http://doi.org/10.1016/S2212-5671(15)01676-7)
- Christodoulides, G., & Chernatony, L. (2010). Consumer based brand equity conceptualization & measurement: a literature review. *International Journal of Market Research*, 52, 44–53.
- Christodoulides, G., De Chernatony, L., Furrer, O., Shiu, E., & Abimbola, T. (2006). Conceptualising and measuring the equity of online brands. *Journal of Marketing Management*, 22(7–8), 799–825. <http://doi.org/10.1362/026725706778612149>
- Christodoulides, G., Jevons, C., & Bonhomme, J. (2012). Memo to marketers : Quantitative evidence for change. *Journal of Advertising Research*, 52(March), 53–65. <http://doi.org/10.2501/JAR-52-1-053-064>
- Chu, S., Kamal, S., & Kim, Y. (2013). Understanding consumers' responses toward social media advertising and purchase intention toward luxury products. *Journal of Global Fashion Marketing*, 4(3), 158–174. <http://doi.org/10.1080/20932685.2013.790709>
- Chu, S., & Keh, H. T. (2006). Brand value creation: Analysis of the interbrand-business week brand value rankings. *Marketing Letters*, 17(4), 323–331. <http://doi.org/10.1007/s11002-006-9407-6>
- Churchil, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(Feb), 64–73. <http://doi.org/10.1017/CBO9781107415324.004>
- Çifci, S., Ekinci, Y., Whyatt, G., Japutra, A., Molinillo, S., & Siala, H. (2016). A cross validation of Consumer-Based Brand Equity models: Driving customer equity in retail brands. *Journal of Business Research*, 69(9), 3740–3747. <http://doi.org/10.1016/j.jbusres.2015.12.066>
- Clarke, G. (2002). *Consumer behavior: buying, having and being', international edition by M. R. Solomon, Prentice Hall, Upper Saddle River, NJ, USA; 2002, ISBN 0 13 095008 4; 549 pages. Journal of Consumer Behaviour (Vol. 1).* <http://doi.org/10.1002/cb.84>

- Cobb-Walgren, C. J., Ruble, C. a., & Donthu, N. (1995). Brand equity, brand preference, and purchase intent. *Journal of Advertising*, 24(3), 25–40. <http://doi.org/10.1080/00913367.1995.10673481>
- Cohen, L., Manion, L., & Morrison, K. R. F. L. (2000). *Research methods in Education*.
- Commission, M. C. and M. (2016). *Internet Users Survey 2013*.
- Cortés, S. L. T. M. R. M.-T. F. B. F., & Article. (2009). An empirical study of the driving forces behind online communities. *Internet Research*, 19(4), 378–392.
- Creswell, J. W. Qualitative inquiry and research design: Choosing among five traditions, 9SAGE Publications 403 (2007). <http://doi.org/10.1111/1467-9299.00177>
- Creusen, M. E. H., & Schoormans, J. P. L. (2005). The different roles of product appearance in consumer choice. *Journal of Product Innovation Management*, 22(1), 63–81. <http://doi.org/10.1111/j.0737-6782.2005.00103.x>
- Cui, W. (2011). Creating consumer-based brand equity in the chinese sports shoes market : Measurement , challenges and opportunities. *International Marketing*, (September).
- Davcik, N. S., Vinhas, R., & Hair, J. F. (2015). Towards a unified theory of brand equity : conceptualizations , taxonomy and avenues for future research. *Journal of Product & Brand Management*, 24(1), 3–17. <http://doi.org/10.1108/JPBM-06-2014-0639>
- Davis, R., Piven, I., & Breazeale, M. (2014). Conceptualizing the brand in social media community: The five sources model. *Journal of Retailing and Consumer Services*, 21(4), 468–481. <http://doi.org/10.1016/j.jretconser.2014.03.006>
- De Chernatony, L., & Francesca, D. R. (1998). Defining a brand beyond literature with experts interpretations. *Journal of Marketing Management*, 417–443.
- De Chernatony, L., & McDonald, M. (2003). *Creating Powerful Brands. Creating powerful brands: the strategic route to success in consumer, industrial and service markets*. Oxford: Butterworth Heinemann.
- De Vries, L., Gensler, S., & Leeftang, P. S. H. (2012). Popularity of brand posts on brand fan pages: an investigation of the effects of social media marketing. *Journal of Interactive Marketing*, 26(2), 83–91. <http://doi.org/10.1016/j.intmar.2012.01.003>
- Demangeot, C., & Broderick, A. J. (2010). Consumer perceptions of online shopping environments. *Psychology & Marketing*, 30(6), 461–469. <http://doi.org/10.1002/mar>

- DeVellis, R. F. (2003). *Scale Development: Theory and Applications*. *Applied Social Research Methods Series* (Vol. 26). <http://doi.org/10.1038/156278a0>
- Dholakia, U. M., Bagozzi, R. P., & Pearo, L. K. (2004). A social influence model of consumer participation in network- and small-group-based virtual communities. *International Journal of Research in Marketing*, 21(3), 241–263. <http://doi.org/10.1016/j.ijresmar.2003.12.004>
- Ding, L., Velicer, W. F., & Harlow, L. L. (1995). Effects of estimation methods, number of indicators per factor, and improper solutions on structural equation modeling fit indices. *Structural Equation Modeling: A Multidisciplinary Journal*, 2(2), 119–143. <http://doi.org/10.1080/10705519509540000>
- Doorn van, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: theoretical foundations and research directions. *Journal of Service Research*, 13(3), 253–266. <http://doi.org/10.1177/1094670510375599>
- Edwards, S. M., Li, H., & Lee, J.-H. (2002). Forced exposure and psychological reactance: antecedents and consequences of the perceived intrusiveness of pop-up ads. *Journal of Advertising*, 31(3), 83–95. <http://doi.org/10.2307/4189228>
- Eisingerich, A. B., Chun, H. H., Liu, Y., Jia, H. M., & Bell, S. J. (2014). Why recommend a brand face-to-face but not on Facebook? How word-of-mouth on online social sites differs from traditional word-of-mouth. *Journal of Consumer Psychology*, 25(1), 120–128. <http://doi.org/10.1016/j.jcps.2014.05.004>
- Falk, R., & Miller, N. B. (1992). A Primer for Soft Modeling. *Open Journal of Business and Management*, 2(April), 103. Retrieved from http://books.google.com/books/about/A_Primer_for_Soft_Modeling.html?id=3CFrQgAACAAJ
- Farjam, S., & Hongyi, X. (2015). Reviewing the Concept of Brand Equity and Evaluating Consumer- Based Brand Equity (CBBE) Models. *ISSN International Journal of Management Science And Business Administration International Journal of Management Science and Business Administration*, 1(8), 1849–5419.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: a flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–91. <http://doi.org/10.3758/BF03193146>
- Fetscherin, M., & Toncar, M. (2009). Valuating brand equity and product related attributes in the context of the german automobile market. *Journal of Brand Management*, 17(2), 45–134.
- Field, A. (2009). *Discovering Statistics Using SPSS*. *Sage Publication* (Vol. 58). <http://doi.org/10.1234/12345678>

- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: algebra and statistics. *Journal of Marketing Research*, 18(3), 382. <http://doi.org/10.2307/3150980>
- Foxall, G. R. (1987). Consumer behavior. *Journal of the Market Research Society*, 29(3), 369–370. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=6772153&site=ehost-live>
- Gensler, S., Völckner, F., Liu-Thompkins, Y., & Wiertz, C. (2013). Managing brands in the social media environment. *Journal of Interactive Marketing*, 27(4), 242–256. <http://doi.org/10.1016/j.intmar.2013.09.004>
- Ghani, N. H. A. (2012). Relationship marketing in branding: The automobile authorised independent dealers in Malaysia. *International Journal of Business and Social Science*, 3(5), 144–154.
- Ghorban, Z. S. (2012). The role of advertising and promotions in enhancing brand credibility and customers ' using intention. *IOSR Journal of Business and Management (IOSRJBM)*, 1(3), 43–49.
- Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R., & Singh, R. (2016). Social media marketing efforts of luxury brands: Influence on brand equity and consumer behavior. *Journal of Business Research*, 69(12), 5833–5841. <http://doi.org/10.1016/j.jbusres.2016.04.181>
- Goh, K., Heng, C.-S., & Lin, Z. (2013). Social media brand community and consumer behavior: quantifying the relative impact of user- and marketer-generated content social media brand community and consumer behavior: quantifying the relative impact of user- and marketer-generated content. *Information Systems Research*, 24, 88–107. <http://doi.org/10.1287/isre.1120.0469>
- Goldsmith, R. R. E., & Horowitz, D. (2006). Measuring motivations for online opinion seeking. *Marketing Science*, 23(4), 545–560. <http://doi.org/10.1080/15252019.2006.10722114>
- Goodrich, K. (2011). Anarchy of effects? Exploring attention to online advertising and multiple outcomes. *Psychology & Marketing*, 28(4), 417–440. <http://doi.org/10.1002/mar>
- Graa, a. & Dani-elKaebir, M. (2012). Application of stimulus & response model to impulse buying behavior of Algerian consumers. *Serbian Journal of Management*, 7(1), 53 - 64.
- Gummerus, J., Liljander, V., Weman, E., & Pihlstrom, M. (2015). Customer engagement in Facebook brand community. *Management Research Review*, Vol. 35(9), pp.857-877. <http://doi.org/http://dx.doi.org/10.1108/02683940010305270>

- Hadadi, K., & Almsafir, M. K. (2014). The impact of online advertising on proton sales among expatriates in Malaysia. *Procedia - Social and Behavioral Sciences*, 129, 274–281. <http://doi.org/10.1016/j.sbspro.2014.03.677>
- Haida, A., & Rahim, H. L. (2015). Social media advertising value : a study on consumer ' s perception. *International Academic Research Journal*, 1(1), 1–8.
- Hair, Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate Data Analysis*. Prentice Hall.
- Hajli, M. N. (2013). A study of the impact of social media on consumers. *International Journal of Market Research*, 56(3), 387–404. <http://doi.org/10.2501/U M R-2014-025>
- Hamid, N., Romiza, R., & Cheng, A. (2013). Social media: an emerging dimension of marketing communication. *Journal of Management and Marketing Research*, 20, 1–8. <http://doi.org/10.1024/0301-1526.37.S71.3>
- Hanaysha, J. (2016). The importance of social media advertisements in enhancing brand equity : a study on fast food restaurant industry in Malaysia. *International Journal of Innovation, Management and Technology*, 7(2), 46–51. <http://doi.org/10.18178/ijimt.2016.7.2.643>
- Hanaysha, J., & Hilman, H. (2015). Advertising and country of origin as key success factors for creating sustainable brand equity. *Journal of Asian Business Strategy*, 5(7), 2225–4226.
- Hennig-Thurau, T., Malhotra, E. C., Frieger, C., Gensler, S., Lobschat, L., Rangaswamy, A., & Skiera, B. (2010a). The Impact of new media on customer relationships. *Journal of Service Research*, 13(3), 311–330. <http://doi.org/10.1177/1094670510375460>
- Hennig-Thurau, T., Malhotra, E., Frieger, C., Gensler, S., Lobschat, L., Rangaswamy, A., & Skiera, B. (2010b). The impact of new media on customer relationships. *Journal of Service Research*, 13(3), 311–330. <http://doi.org/10.1177/1094670510375460>
- Ho, C. (2014). Consumer behavior on Facebook: Does consumer participation bring positive consumer evaluation of the brand? *EuroMed Journal of Business*, 9(3), 252–267.
- Hoeffler, S., & Keller, K. L. (2003). The marketing advantages of strong brands. *Journal of Brand Management*, 10(6), 421–445. <http://doi.org/10.1057/palgrave.bm.2540139>
- Holliman, G., & Rowley, J. (2014). Business to business digital content marketing: marketers' perceptions of best practice. *Journal of Research in Interactive Marketing*, 8(4), 269–293. <http://doi.org/10.1108/JRIM-02-2014-0013>

- Homer, P. M. (2008). Perceived quality and image: When all is not “rosy.” *Journal of Business Research*, 61(7), 715–723. <http://doi.org/10.1016/j.jbusres.2007.05.009>
- Horn, D., & Salvendy, G. (2006). Consumer-based assessment of product creativity: a review and reappraisal. *Human Factors and Ergonomics in Manufacturing*, 16(2), 155–175. <http://doi.org/10.1002/hfm>
- Houston, M. B. (2004). Assessing the validity of secondary data proxies for marketing constructs. *Journal of Business Research*, 57(2), 154–161. [http://doi.org/10.1016/S0148-2963\(01\)00299-5](http://doi.org/10.1016/S0148-2963(01)00299-5)
- Hsieh, M.-H. (2004). Measuring global brand equity using cross-national survey data. *Journal of International Marketing*, 12(2), 28–57. <http://doi.org/10.1509/jimk.12.2.28.32897>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <http://doi.org/10.1080/10705519909540118>
- Jalilvand, M. R., & Samiei, N. (2012). The effect of electronic word of mouth on brand image and purchase intention. *Marketing Intelligence & Planning*, 32(4), 413–435. <http://doi.org/10.1108/02634501011078138>
- Jang, Y. J., & Chen, P. (2013). Exploring social networking sites for facilitating multi channel retailing.pdf. *Multimedia Tools and Applications*, 74(1), 159–178.
- Jaskani, N. H. (2015). Examining attitudes and beliefs towards online advertising in Pakistan. *International Journal of Scientific & Engineering Research*, 6(1), 463–480.
- Jusoh, N. A. Q. B., Hashim, F. B., & Adi, M. N. B. M. (2012). Investigating online social website portals as marketing communication medium of Malaysia local cosmetic SMEs. *Proceedings International Conference of Technology Management, Business and Entrepreneurship 2012*, 2012, 730–743. Retrieved from https://www.academia.edu/2527035/Investigating_online_social_websites_portal_as_marketing_communication_medium_of_Malaysia_local_cosmetic_SMES?login=code610@gmail.com&email_was_taken=true
- Johansson, J. K., Dimofte, C. V. & Mazvancheryl, S. K. (2012). The performance of global brands in the 2008 financial crisis: A test of two brand value measures. *International Journal of Research in Marketing*, 29(3), 235-245.
- Joseph, J. & Sivakumaran, B. (2009). The moderating effect of loyalty on the relationship of sales promotions and brand equity. *AP - Asia-Pacific Advances in Consumer Research*, 8, 263 - 264. Retrieved from; file:///C:/Users/USER/Downloads/ap08_ap_2009_vol8_26.pdf

- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31–36. <http://doi.org/10.1007/BF02291575>
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59–68. <http://doi.org/10.1016/j.bushor.2009.09.003>
- Karamian, H., Nadoushan, M. A., & Nadoushan, A. A. (2015). Do social media marketing activities increase brand equity? Brand equity. *International Journal of Economy, Management and Social Sciences*, 4(3), 362–365.
- Karman, M. A. (2015). The impact of social media marketing on brand equity toward the purchase intention of Starbucks Indonesia, 3(2), 77–88.
- Karpińska-Krakiwiak, M. (2016). The effects of social networking sites on consumer–brand relationships. *Journal of Computer Information Systems*, 56(3), 204–210. <http://doi.org/10.1080/08874417.2016.1153894>
- Karson, E. J., McCloy, S. D., & Bonner, P. G. (2006). An Examination of Consumers' Attitudes and Beliefs towards Web Site Advertising. *Journal of Current Issues & Research in Advertising*, 28(2), 77–91. <http://doi.org/10.1080/10641734.2006.10505200>
- Kartono, B., & R., R. V. (2005). *Linking Consumer-Based Brand Equity to Market Performance: An Integrated Approach to Brand Equity Management*. Zyman Institute of Brand Science. Retrieved from www.zibs.com/.../Linking CBE Market Performance.pdf
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1. <http://doi.org/10.2307/1252054>
- Keller, K. L. (2001). Building customer-based brand equity : a blueprint for creating strong brands building customer-based brand equity. *Journal of Marketing Communications*, 15(2–3), 139–155. <http://doi.org/10.1080/13527260902757530>
- Keller, K. L. (2009). Building strong brands in a modern marketing communications environment. *Journal of Marketing Communications*. <http://doi.org/10.1080/13527260902757530>
- Keller, K. L. (2010). Brand equity management in a multichannel, multimedia retail environment. *Journal of Interactive Marketing*, 24(2), 58–70. <http://doi.org/10.1016/j.intmar.2010.03.001>
- Keller, K. L., & Lehman, D. R. (2006). Brands and branding: Research findings and future priorities. *Marketing Science*, 25(6), 740–759. <http://doi.org/10.1287/mksc.1050.0153>
- Keller, K. L., & Lehman, D. R. (2003). How do brands create value? *Marketing*

Management, 12(3), 26–31. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=10600463&site=ehost-live>

- Kenyon, G., & Sen, K. (2012). A model for assessing consumer perceptions of quality. *International Journal of Quality and Service Sciences*, 4(2), 175–188. <http://doi.org/10.1108/17566691211232909>
- Khadim, R. A., Younis, M., Mahmood, A., & Khalid, R. (2015). Firm-created social media communication and consumer brand perceptions. *International Journal of Marketing and Technology*, 5(3), 100–119.
- Khadim, R. A., Zafar, B., Younis, M., & Nadeem, M. A. (2014). Social Media communication and consumer brand perceptions. *International Journal of Social Sciences and Management Studies*, 1(1), 12–20.
- Kim, A. J., & Ko, E. (2010). Impacts of luxury fashion brand's social media marketing on customer relationship and purchase intention. *Journal of Global Fashion Marketing*, 1(3), 164–171. <http://doi.org/10.1080/20932685.2010.10593068>
- Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480–1486. <http://doi.org/10.1016/j.jbusres.2011.10.014>
- Kim, D., Spiller, L., & Hettche, M. (2015). Analyzing media types and content orientation in Facebook for global brands. *Journal of Managerial Psychology*, Vol. 9, No(1), 4–30. <http://doi.org/http://dx.doi.org/10.1108/02683940010305270>
- Kim, W. G., & Kim, H.-B. (2004). Measuring customer-based restaurant brand equity. *The Cornell Hotel and Restaurant Administration Quarterly*, 45(2), 115–131. <http://doi.org/10.1177/0010880404264507>
- Kiyani, T. M., Niazi, M. R. U. K., Rizvi, R. A., & Khan, I. (2012). The relationship between brand trust, customer satisfaction and customer loyalty. (evidence from automobile sector of Pakistan). *Interdisciplinary Journal of Contemporary Research in Business*, 4(1), 489–502.
- Kline, R. B. (2005). Principles and practice of structural equation modeling. *Methodology in the Social Sciences*, 2, 366. <http://doi.org/10.1038/156278a0>
- Kline, R. B. (2010). *Principles and practice of structural equation modeling. Structural Equation Modeling* (Vol. 156). <http://doi.org/10.1038/156278a0>
- Koçak, A., Abimbola, T. & Özer, A. (2007). Consumer brand equity in a cross-cultural replication: an evaluation of a scale. *Journal of Marketing Management*, 23(1), 157-173.

- Kotler, P. & Armstrong, G., (2008). *Principles of Marketing, Global and Southern African Perspectives* 12th Edition, Pearson, Prentice Hall, South Africa.
- Kotler, P. (1997). *Marketing Management: Analysis, Planning, Implementation and Control* (9th ed.). India: Prentice Hall.
- Kotler, P., Keller, K., Brady, M., Goodman, M., & Hansen, T. (2009). Marketing management. In *Marketing Management* (Vol. 37, pp. 40–47). Retrieved from <http://eprints.lancs.ac.uk/29662/>
- Kotler, P., & Keller, K. L. (2012). *Marketing Management, 14th Edition. Organization* (Vol. 22). <http://doi.org/10.1080/08911760903022556>
- Kotler, P., Keller, K. L., Brady, M., Goodman, M. & Hensen, T. (2009). *Marketing Management*, Harlow, New York: Prentice Hall.
- Kormin, K. & Baharun, R. (2016). Social media and relationship marketing strategies of Malaysian car brands. *Indian Journal of Science and Technology*, 9(46), 1-8.
- Langaro, D., Rita, P., & de Fátima Salgueiro, M. (2015). Do social networking sites contribute for building brands? Evaluating the impact of users' participation on brand awareness and brand attitude. *Journal of Marketing Communications*, (July 2015), 1–23. <http://doi.org/10.1080/13527266.2015.1036100>
- Lee, T. W. & Govindan, S. (2014). Emerging issues in car purchasing decision. *Academic Research International*, 5(5), 170-179.
- Leeflang, P. S. H. & Parreno-Selva, J. (2012). Cross-category demand effects of price promotions. *Journal of the Academy of Marketing Science*, 40(4), 572-596.
- Lehner, M., & Halliday, S. V. (2014). Branding sustainability : Opportunity and risk behind a brand - based approach to su stainable markets. *Ephemera Theory & Politics in Organization*, 14(1), 13–34.
- Lew, S., & Sulaiman, Z. (2014). Consumer Purchase Intention toward Products Made in Malaysia vs. Made in China: A Conceptual Paper. *Procedia - Social and Behavioral Sciences*, 130, 37–45. <http://doi.org/10.1016/j.sbspro.2014.04.005>
- Lewis, C. C., Weiner, B. J., Stanick, C., & Fischer, S. M. (2015). Advancing implementation science through measure development and evaluation: a study protocol. *Implementation Science : IS*, 10, 102. <http://doi.org/10.1186/s13012-015-0287-0>
- Li, Y., & Mousseaux, S. (2013). *Luxury fashion brands on social media : a study of young consumers ' perception*. TEXTILHOGSKOLAN HOGSKOLAN I BORAS.

- Liu, Y. (2010). Word-of-Mouth for movies: its dynamics and impact on box office revenue. *Journal of Marketing*, 74(1), 1–49. <http://doi.org/10.1509/jmkg.70.3.74>
- Mackenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS Quarterly*, 35(2), 293–334. Retrieved from <http://dl.acm.org/citation.cfm?id=2017510%5Cnpapers3://publication/uuid/E4D3717C-7F3F-4791-8835-141D4309976B>
- Mahfooz, Y. (2015). Brand equity-consequence relationship: Evidence from automobile industry. *International Journal of Business and Management*, 10(3), 81–90. <http://doi.org/10.5539/ijbm.v10n3p81>
- Malaysia Digital Association. (2016). *Digital Landscape Exploring the Digital Landscape in Malaysia- 2016 Malaysia Digital Landscape*.
- Malthouse, E., Calder, B., & Eadie, W. (2003). Conceptualizing and measuring magazine experiences and readership. *Worldwide Readership Research Symposia*, 11, 285–306. Retrieved from <http://mediamanagementcenter.sectorlink.org/research/magazineconcept.pdf>
- Mangold, W.G., & Faulds, D. J. (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons* 52(4), 357–365.
- Maoyan, Zhujunxuan, & Sangyang. (2014). Consumer purchase intention research based on social media marketing, 5(10), 92–97.
- Martínez, E., Montaner, T., & Pina, J. M. (2009). Brand extension feedback: The role of advertising. *Journal of Business Research*, 62(3), 305–313. <http://doi.org/10.1016/j.jbusres.2008.05.009>
- Mathews, C., Ambroise, L., & Brignier, J.-M. (2009). Hedonic and symbolic consumption perceived values: opportunities for innovators and designers in the fields of brand and product design. *Proceedings of the 9th EURAM (European Academy of Management) Conference*, 32p. Retrieved from <http://halshs.archives-ouvertes.fr/halshs-00654731>
- MCMC. (2009). *Advertisement Development in Malaysia: Catching Eyeballs in Changing Media*. Retrieved from www.skmm.gov.my
- Mirabi, V., Akbariyeh, H., & Tahmasebifard, H. (2015). A study of factors affecting on customers purchase intention case study : The agencies of bono brand tile in Tehran. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2(1), 267–273. <http://doi.org/10.1017/CBO9781107415324.004>
- Mizik, N., & Jacobson, R. (2003). The financial implications of shifts inand value appropriation : *Journal of Marketing*, 67(January), 63–76.

- Mkhitaryan, D. (2014). Determinants of brand equity in automobile producing companies in China. *Journal of Business Administration Research*, 3(1), 38–44. <http://doi.org/10.5430/jbar.v3n1p38>
- Mollen, A. & Wilson, H. (2010). Engagement, telepresence and interactivity in online consumer experience: reconciling scholastic and managerial perspectives. *Journal of Business Research*, 63,19-25.
- Monavvarian, A., Asgari, N., & Hoseinabadi, A. R. (2015). Studying the effects of brand equity on the consumers responses in the service markets. *International Journal of Economic, Commerce and Management, United Kingdom*, 3(3), 1–18.
- Moradi, H., & Zarei, A. (2011). The impact of brand equity on purchase intention and brand preference-the moderating effects of country of origin image. *Australian Journal of Basic and Applied Sciences*, 5(3), 539–545. Retrieved from file:///C:/Users/Arjuna/Desktop/New folder/Purchase Intention/2011 Hadi Moradi.pdf
- Morra, M. C., Ceruti, F., Chierici, R. & Gregorio, A. D. (2018). Social vs traditional media communication: brand origin associations strike a chord. *Journal of Research in Interactive Marketing*, 12(1), 2-21.
- Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for Brand-Related social media use. *International Journal of Advertising*, 30(1), 13–46. <http://doi.org/IJA-30-1-013-046>
- Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for Brand-Related social media use. *International Journal of Advertising*, 30(1), 13–46. <http://doi.org/10.2501/IJA-30-1-013-046>
- Murtiasih, S., & Siringoringo, H. (2013). How word of mouth influence brand equity for automotive products in Indonesia. *Procedia - Social and Behavioral Sciences*, 81, 40–44. <http://doi.org/10.1016/j.sbspro.2013.06.384>
- Myers, R.H. (1990). *Classical and Modern Regression with Applications*, 2nd edition, Boston, MA: Duxbury.
- Nair, M. (2011). Understanding and measuring the value of social media. *Journal of Corporate Accounting & Finance*, 22(3), 45–51. <http://doi.org/10.1002/jcaf.20674>
- Netemeyer, R. G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., ... Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research*, 57(2), 209–224. [http://doi.org/10.1016/S0148-2963\(01\)00303-4](http://doi.org/10.1016/S0148-2963(01)00303-4)
- Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches. Relevance of social research* (Vol. 8).

<http://doi.org/10.2307/3211488>

- Nicosia, F. M., & Mayer, R. N. (1976). Toward a sociology of consumption. *Journal of Consumer Research*, 3(2), 65. <http://doi.org/10.1086/208653>
- Nijs, V. R., Dekimpe, M. G., Steenkamps, J-B. E. M., Hanssens, D. M. (2001) The category-demand effects of price promotions. *Marketing Science*, 20(1),1-22. <http://dx.doi.org/10.1287/mksc.20.1.1.10197>
- Nikabadi, M. S., Safui, M. A. & Agheshlouei, H. (2015). Role of advertising and promotion in brand equity creation. *Journal of Promotion Management*, 21(1), 13-32.
- Norsiah, A. H., Mohd Subhi, I., & Norhafezah, Y. (2016). Assessing validity and reliability of social media as an empowerment tool for a group at risk in Malaysia. *Malaysian Journal of Communication*, 32(1), 73–86.
- Okazaki, S., & Taylor, C. R. (2013). Social media and international advertising: theoretical challenges and future directions. *International Marketing Review*, 30(1), 56–71.
- Oliveira, P., & Sullivan, A. (2012). *Sustainability and its impact on brand value. Interbrand*.
- Pallant, J. (2013). *SPSS survival manual: A step by step guide to data analysis using SPSS. Step by step guide to data analysis using the SPSS program*. Retrieved from [http://solo.bodleian.ox.ac.uk/primo_library/libweb/action/search.do?dscent=1&vl\(drStartDay6\)=00&vl\(60606418UI3\)=all_items&scp.scps=scope:\(OULS\),scope:\(NET\)&tab=local&srt=rank&mode=Advanced&vl\(1UIStartWith1\)=contains&tb=t&indx=1&vl\(drEndYear6\)=Year&vl\(freeT](http://solo.bodleian.ox.ac.uk/primo_library/libweb/action/search.do?dscent=1&vl(drStartDay6)=00&vl(60606418UI3)=all_items&scp.scps=scope:(OULS),scope:(NET)&tab=local&srt=rank&mode=Advanced&vl(1UIStartWith1)=contains&tb=t&indx=1&vl(drEndYear6)=Year&vl(freeT)
- Pappu, R., Quester, P. G., & Cooksey, R. W. (2005). Consumer-based brand equity: improving the measurement – empirical evidence. *Journal of Product & Brand Management*, 14(3), 143–154. <http://doi.org/10.1108/10610420510601012>
- Park, S. U., & Srinivasan, V. (1994). A survey-based method for measuring and understanding brand equity and its extendibility. *Journal of Marketing Research*, 31(2), 271–288.
- Pham, P. H. M., & Gammoh, B. S. (2015). Characteristics of social-media marketing strategy and customer-based brand equity outcomes: A conceptual model. *International Journal of Internet Marketing and Advertising*, 9(4), 321–337. <http://doi.org/10.1504/IJIMA.2015.072885>
- Pinar, M., Trapp, P., Girard, T., & Boyt, T. E. (2014). University brand equity: an empirical investigation of its dimensions. *International Journal of Educational Management*, 28(6), 616–634.

- Polit, D. F., & Beck, C. T. (2006). The Content Validity Index: Are You Sure You Know What's Being Reported? Critique and Recommendations. *Research in Nursing & Health*, 29, 489–497. <http://doi.org/10.1002/nur>
- Pornpitakpan, C. (2004). The Persuasiveness of Source Credibility: A Critical Review of Five Decades' Evidence. *Journal of Applied Social Psychology* 34(2), 243–281.
- Prasad, S., Totala, N. K., Gupta, I. C., Development, H. R., Nagar, V., Extension, U. N., ... Marg, R. N. T. (2014). Social Media and Customer Purchase Decision. *American International Journal of Research in Humanities, Arts and Social Sciences*, 166–171.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and re-sampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
- Puchan, H. (2015). Using Twitter in crisis management for organizations bearing different country-of-origin perceptions. *Journal of Communication Management*, 19(3).
- Pullig, C. (2008). What is Brand Equity and What Does the Branding Concept Mean to You? *Keller Center Research Report*, (June), 1–4.
- Ranjit, K. (2012). *Research Methodology A Step by Step Guide for Beginners. Uma ética para quantos?* (Vol. XXXIII). <http://doi.org/10.1007/s13398-014-0173-7.2>
- Rezaei, H., & Abadi, D. (2013). Analyzing the Effect of Customer Equity on Satisfaction. *International Journal of Academic Research in Business and Social Sciences*, 3(5), 600–611.
- Rohm, A., Kaltcheva, V. D., & Milne, G. R. (2013). A mixed-method approach to examining brand-consumer interactions driven by social media. *Journal of Research in Interactive Marketing*, 7(4), 295–311.
- Rosli, M. (2006). The automobile industry and performance of Malaysia auto production. *Journal of Economic Cooperation*, 27(1), 89–114.
- Rubio, D., Berg-Weger, M., Tebb, S. S., Lee, E. S., & Rauch, S. (2003). Objectifying content validity: Conducting a content validity study in social work research. *Social Work Research*, 27(June 2015), 94–104. <http://doi.org/10.1093/swr/27.2.94>
- Salkind, N. J. (2010). Qualitative Research. In *Encyclopedia of Research Design* (p. 255). <http://doi.org/10.4135/9781412961288.n78>
- Santoso, C. R., & Cahyadi, T. E. (2014). Analyzing the Impact of Brand Equity towards Purchase Intention in Automotive Industry: A Case Study of ABC in

Surabaya. *iBuss Management*, 2(2), 29–39.

Saunders, M., Lewis, P., & Thornhill, A. (2008). *Research Methods for Business Students. Research methods for business students*.
<http://doi.org/10.1007/s13398-014-0173-7.2>

Schivinski, B. (2011). Effects of social media communication on brand equity and brand purchase intention. *PhD Interdisciplinary Journal*, 157–162. Retrieved from http://sdpg.pg.gda.pl/pij/files/2013/09/02_2013_25-schivinski.pdf

Schivinski, B., Christodoulides, G., & Dabrowski, D. (2016). Measuring Consumers ' Engagement With Brand-Related Social-Media Content: Development and Validation of a Scale That Identifies Levels of Social-Media Engagement With Brands. *Journal of Advertising Research*, (March), 1–18.
<http://doi.org/10.2501/JAR-2016-000>

Schivinski, B., & Dabrowski, D. (2014). The consumer-based brand equity inventory: scale construct and validation Bruno Schivinski *, Dariusz Dabrowski **. *GUT FME Working Paper Series A*, 2014(4), 22.

Schivinski, B., & Dabrowski, D. (2014). The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications*, 0(12), 1–26. <http://doi.org/10.1080/13527266.2013.871323>

Schivinski, B., & Dabrowski, D. (2015). The impact of brand communication on brand equity through Facebook. *Journal of Research in Interactive Marketing*, 9(1), 31–53.

Schivinski, B., Łukasik, P., & Dabrowski, D. (2015). User-generated images and its impact on consumer-based brand equity and on purchase intention. *Logistyka*, 52(2), 1054–1061.

Schultz, D. E., & Peltier, J. (Jimmy). (2013). Social media's slippery slope: challenges, opportunities and future research directions. *Journal of Research in Interactive Marketing*, 7(2), 86–99.

Sekaran, U. (2012). *Research Methods for Business A Skill Building Approach*. (F. Edition, Ed.). USA: John Wiley & Sons, Inc.
<http://doi.org/10.13140/RG.2.1.1419.3126>

Sekaran, U., & Bougie, R. (2013). Research Methods for Business. In *Research methods for business* (p. 436).

Sen, S., & Lerman., D. (2007). Why Are You Telling Me This? An Examination into Negative Consumer Reviews on the Web. *Journal of Interactive Marketing* 21(4), 76–95.

Severi, E., Ling, K. C., & Nasermoadeli, A. (2014). The Impacts of Electronic Word of Mouth on Brand Equity in the Context of Social Media. *International*

Journal of Business and Management, 9(8), 84–96.
<http://doi.org/10.5539/ijbm.v9n8p84>

Seyfang, G. (2005). Carbon currencies: A new gold standard for sustainable consumption? *Environmental Politics*, 14(2), 290–306.
<http://doi.org/10.1080/09644010500055209>

Shahin, A., Kazemi, A., & Mahyari, H. (2012). How Consumer's Perception of Country of Origin Affects Brand Equity: A Case Study in Iran. *Middle-East Journal of Scientific* ..., 12(6), 878–885.
<http://doi.org/10.5829/idosi.mejsr.2012.12.6.1755>

Shankar, V., & Balasubramanian, S. (2009). Mobile Marketing: A Synthesis and Prognosis. *Journal of Interactive Marketing*, 23(2), 118–129.
<http://doi.org/10.1016/j.intmar.2009.02.002>

Shen, B., & Bissell, K. (2013). Social Media , Social Me : A Content Analysis of Beauty Companies ' Use of Facebook in Marketing and Branding Social Media , Social Me : A Content Analysis of Beauty Companies ' Use of Facebook. *Journal of Promotion Management*, 19(April), 629–651.
<http://doi.org/10.1080/10496491.2013.829160>

Shi, Z., Rui, H., & Whinston, A. (2014). Content sharing in a social broadcasting environment: evidence from twitter. *Mis Quarterly*, 38(1), 123–142.
<http://doi.org/10.2139/ssrn.2341243>

Shook, C. L., Ketchen, D. J., Hult, G. T. M., & Kacmar, K. M. (2004). Research notes and commentaries: An assessment of the use of structural equation modeling in strategic management research. *Strategic Management Journal*, 25(October 2001), 397–404. <http://doi.org/10.1002/smj.385>

Simmons, C. J., & Becker-olsen, K. L. (2006). Achieving Marketing Objectives Through Social Sponsorships. *Journal of Marketing*, 70, 154–169.

Simmons, G., Thomas, B., & Truong, Y. (2010). Managing i-branding to create brand equity. *European Journal of Marketing*, 44, 1260–1285.
<http://doi.org/10.1108/03090561011062835>

Smith, A. N., Fischer, E., & Yongjian, C. (2012). How Does Brand-related User-generated Content Differ across YouTube, Facebook, and Twitter? *Journal of Interactive Marketing*, 26(2), 102–113.
<http://doi.org/10.1016/j.intmar.2012.01.002>

Snijders, T. A. B. (2005). Power and sample size in multilevel linear models. In *Encyclopedia of Statistics in Behavioral Science* (pp. 1570–1573).
<http://doi.org/10.1002/0470013192.bsa492>

Socialbakers. (2015). June 2015 Social Media Report for Malaysia. Retrieved from <http://www.socialbakers.com/resources/reports/regional/malaysia/2015/june/>

- Spears, N., & Singh, S. N. (2004). Measuring Attitude toward the Brand and Purchase Intentions. *Journal of Current Issues & Research in Advertising*, 26(2), 53–66. <http://doi.org/10.1080/10641734.2004.10505164>
- Speed, R., & Thompson, P. (2000). Determinants of Sports Sponsorship Response. *Journal of the Academy of Marketing Science*, 28(2), 226–238. <http://doi.org/10.1177/0092070300282004>
- Stauss, B. (2000). *Using New Media for Customer Interaction: A Challenge for Relationship Marketing. Relationship Marketing.* <http://doi.org/10.1017/CBO9781107415324.004>
- Sudman, S. (1996). How to conduct your own survey: Salent,P and Dillman,DA. *Journal of Marketing Research*.
- Sultana, M., & Amilin, K. I. (2014). Challenges and Opportunities for the Global Automotive Industry. *American International Journal of Contemporary Research*, 4(9), 175–182.
- Taecharungroj, V. (2016). Starbucks' marketing communications strategy on Twitter. *Journal of Marketing Communications*, 7266(February), 1–19. <http://doi.org/10.1080/13527266.2016.1138139>
- Teck Ming, T., Tze Wei, L., Lee, W. S. S., Ong, M. B. F., & Su-Mae, T. (2012). Consumer-based Brand Equity in the Service Shop. *International Journal of Marketing Studies*, 4(4), 60–77. <http://doi.org/10.5539/ijms.v4n4p60>
- Thiripurasundari, U., & Natarajan, P. (2011). Determinants of Brand Equity in Indian Car Manufacturing Firms. *International Journal of Trade, Economics and Finance*, 2(4), 346–350. Retrieved from <http://0-search.proquest.com.wam.leeds.ac.uk/>
- Tolba, A. H., & Hassan, S. S. (2009). Linking customer-based brand equity with brand market performance: a managerial approach. *Journal of Product & Brand Management*, 18(5), 356–366. <http://doi.org/10.1108/10610420910981837>
- Tong, X., & Hawley, J. M. (2009). Measuring customer-based brand equity: empirical evidence from the sportswear market in China. *Journal of Product & Brand Management*, 18(4), 262–271. <http://doi.org/10.1108/10610420910972783>
- Toriman, M. E. (2011). Introduction challenges of media and communication issues: Implications for malaysian public sectors. *Innovation Journal*, 16(3), 1–5.
- Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: findings from an internet social networking site. *Journal of Marketing*, 73(5), 90–102. <http://doi.org/10.1509/jmkg.73.5.90>
- Tsai, W.-H. S., & Men, L. R. (2013). Motivations and antecedents of consumer

- engagement with brand pages on social networking sites. *Journal of Interactive Advertising*, 13(2), 76–87. <http://doi.org/10.1080/15252019.2013.826549>
- Tuominen, P. (1999). Managing Brand Equity. *LTA*, 1, 65–100. <http://doi.org/10.2307/1252048>
- Vakratsas, D. & Ambler, T. (1999). How advertising works: What do we really know? *Journal of Marketing*, 63(1), 26-43.
- Valette-Florence, P., Guizani, H., & Merunka, D. (2011). The impact of brand personality and sales promotions on brand equity. *Journal of Business Research*, 64, 24–28. <http://doi.org/10.1016/j.jbusres.2009.09.015>
- Verhoef, P. C., Langerak, F., & Donkers, B. (2007). Understanding brand and dealer retention in the new car market: The moderating role of brand tier. *Journal of Retailing*, 83(1), 97–113. <http://doi.org/10.1016/j.jretai.2006.10.007>
- Villanueva, J., & Hanssens, D. M. (2006). Customer equity: measurement, management and research opportunities. *Foundations and Trends® in Marketing*, 1(1), 1–95. <http://doi.org/10.1561/17000000002>
- Villarejo-Ramos, A. F., & Sánchez-Franco, M. J. (2005). The impact of marketing communication and price promotion on brand equity. *Journal of Brand Management*, 12(6), 431–444. <http://doi.org/10.1057/palgrave.bm.2540238>
- Vinh, T. T., & Huy, L. Van. (2016). The relationships among brand equity, brand preference, and purchase intention: empirical evidence from the motorbike market in Vietnam. *International Journal of Economics and Finance*, 8(3), 75. <http://doi.org/10.5539/ijef.v8n3p75>
- Wang, H.-M. D. (2010). Corporate social performance and financial-based brand equity. *Journal of Product & Brand Management*, 19(5), 335-345.
- Ward, J., & Ostrom, A. (2006). Complaining to the masses: The role of protest framing in customer-created complaint web sites. *Journal of Consumer Research*, 33, no. September
- Williams, P., & Soutar, G. N. (2009). Value, satisfaction and behavioral intentions in an adventure tourism context. *Annals of Tourism Research*, 36(3), 413–438. <http://doi.org/10.1016/j.annals.2009.02.002>
- Winer, R. S. (1986). A reference price model of brand choice for frequently purchased products. *Journal of Consumer Research*, 13, 250–256.
- Wolny, J., & Mueller, C. (2013). Analysis of fashion consumers' motives to engage in electronic word of mouth communication through social media platforms. *Journal of Marketing Management*, 29(5–6), 562–583. <http://doi.org/10.1080/0267257X.2013.778324>

- Woodcock, N., Green, A., & Starkey, M. (2011). Social CRM as a business strategy. *Database Marketing & Customer Strategy Management*, 18, 50–64. <http://doi.org/10.1057/dbm.2011.7>
- Wu, S.-I., & Jang, J.-Y. (2013). The impact of ISO certification on consumers' purchase intention. *Total Quality Management & Business Excellence*, 25(3–4), 412–426. <http://doi.org/10.1080/14783363.2013.776770>
- Xu, J. B., & Chan, A. (2010). A conceptual framework of hotel experience and customer-based brand equity: Some research questions and implications. *International Journal of Contemporary Hospitality Management*, 22(2), 174–193. <http://doi.org/10.1108/IJCHM-10-2014-0510>
- Yasin, N. M., Noor, M. N., & Mohamad, O. (2007). Does image of country-of-origin matter to brand equity? *Journal of Product & Brand Management*, 16(1), 38–48. <http://doi.org/10.1108/10610420710731142>
- Yazdanparast, A., Joseph, M., & Muniz, F. (2016). Consumer based brand equity in the 21st century: an examination of the role of social media marketing. *Young Consumers*, 17(3), 243–255.
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1–14. [http://doi.org/10.1016/S0148-2963\(99\)00098-3](http://doi.org/10.1016/S0148-2963(99)00098-3)
- Yoo, B., Donthu, N., & Lee, S. (2000). An Examination of Selected Marketing Mix Elements and Brand Equity. *Journal of the Academy of Marketing Science*. <http://doi.org/10.1177/0092070300282002>
- Zailskaite-jakste, L., & Kuvykaite, R. (2012). Consumer engagement in social media by building the brand. *Electronic International Interdisciplinary Conference*, 194–202.
- Zailskaite-jakste, L., & Kuvykaite, R. (2013). Communication in social media for brand equity building. *Economics and Management*, 18(1), 142–153.
- Zhang, X., Bu, G., Wu, S., & Xie, Q. (2011). Research on brand equity of automobile industry - based on customer experience and modern service. *2011 International Conference on Management and Service Science*, 3(1), 1–4. <http://doi.org/10.1109/ICMSS.2011.5998834>
- Zhang, Y. (2015). The impact of brand image on consumer behavior: A literature review. *Open Journal of Business and Management*, 3, 58–62. <http://doi.org/10.4236/ojbm.2015.31006>
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering baron and kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37, 197–210

Appendix A

Item-Development

Table 1: Definitions of Automotive CBBE Dimensions

Definitions	Major References
<p>Automotive CBBE Automotive CBBE is defined as consumers' knowledge and perceptions of the brand awareness, functional brand image, hedonic brand image and brand sustainability of automotive brands.</p>	Bruhn, Schoenmueller & Schafer (2012) and Baalbaki and Guzman (2016).
<p>Functional Brand Image Functional brand image signifies consumers' perceptions of the performance of engine, interiors, body structure and comfort of an automotive brand.</p>	Bruhn, Schoenmueller & Schafer (2012)
<p>Hedonic Brand Image Hedonic brand image can be explained as the perceptions, feelings, or meaning that consumers created from abstract and imagery-related considerations that are not necessarily related to the functional attributes, performance and utilitarian of an automotive brand. This can be referred as the personality, social value and brand leadership of an automotive brand.</p>	Bruhn, Schoenmueller & Schafer (2012).
<p>Brand Sustainability Brand sustainability refers to consumers' judgments and awareness of an automotive brand's consciousness and mindfulness to safety, health, environmental and financial sustainability.</p>	Baalbaki & Guzmán (2016)

Table 2: Definitions of Social Media Marketing Communications Constructs

Definitions	Major References
Firm-Created Contents	
Social Media Advertising Social media advertising is creative, entertaining and brand related-information that are posted by brand owners on social media platforms to promote brands, increase awareness and evoke brand purchase.	Keller (2009)
Social Media Promotion Social media sales promotion is both monetary and non-monetary sales promotions that are anchored on social media platforms. Monetary sales promotion refers to using and offering price discounts and coupons. Non-monetary sales promotions referred to offering gifts and product trails on social media.	Keller (2009)
Social Media Interactive Marketing Marketing activities or messages that are disseminated on social media platforms to engage real or prospective consumers and directly or indirectly raise awareness, improve connection between brand and consumers or elicit sales of products and services.	Keller (2009)
User Generated Contents	
Social Media Word-of-Mouth Social media word-of-mouth are consumers' evaluations, reviews and usage experiences of a product that are disseminated among multitude of customers on social media platforms.	Keller (2009)

Table 3: Items Adopted for CBBE for Automotive Brands

Statements	Sources
Brand Awareness	
1. I can recognize X among other car brands.	Yoo & Donthu (2001)
2. I know what the car look like.	
3. Some characteristics of X come to my mind quickly	Yoo & Danthu (2001)
4. I quickly recall the symbol/logo of the car brand	Yoo & Danthu (2001)
5. I am aware of X	Yoo & Danthu (2001)
6. It is a well-known car	Brunello (2015)
7. I can recognize the brand of this car among other competing brands	Hanaysha and Hilman (2015)

Hedonic Brand Image

1. [Brand] is desirable Bruhn, Schoenmueller & Schafer (2012)
2. [Brand] is strong in personality Bruhn, Schoenmueller & Schafer (2012)
3. It has unique features Brunello (2015)
4. It can be considered a fashionable Brunello (2015)
5. The car brand has reputation for quality Baalbaki and Guzman (2016)
Brunello (2015)
6. It provides users with a better lifestyle Brunello (2015)
7. It provides good value to its users Brunello (2015)
8. [Brand X] improves the way I am perceived by others Baalbaki and Guzman (2016)
Brunello (2015)
9. [Brand X] would make a good impression on other people Baalbaki and Guzman (2016)
Brunello (2015)
10. [Brand X] would give its owner social approval Baalbaki and Guzman (2016)
Brunello (2015)
11. [Brand X] helps me feel accepted Baalbaki and Guzman (2016)
Brunello (2015)
12. [Brand] is an attractive brand Verhoef, Langerak and Donkers (2007)
13. It is a class car Brunello (2015)
14. It is a market leader Brunello (2015)
15. It is a successful car Brunello (2015)
16. It is a corporate car Brunello (2015)
17. It is a fast car Brunello (2015)
18. It is a reliable car Brunello (2015)
19. It is a secure car Brunello (2015)
20. It is up to date with the trends of the automotive industry Brunello (2015)
21. It is a courageous car Brunello (2015)
22. The car brand is a modern car Brunello (2015)
23. [Brand] is attractive Bruhn, Schoenmueller & Schafer (2012)

Functional Brand Image

1. The reliability of [Brand X] is very high Baalbaki and Guzman (2016)
 2. [Brand X] is consistent in the quality it offers Baalbaki and Guzman (2016)
 3. The performance of [Brand X] is very high Baalbaki and Guzman (2016)
 4. [Brand X] has acceptable standard of quality Baalbaki and Guzman (2016)
 5. The functionality of [Brand X] is very high Baalbaki and Guzman (2016)
-

6. [Brand X] performs consistently	Baalbaki and Guzman (2016)
7. [Brand X] has consistent quality	Baalbaki and Guzman (2016)
8. [Brand X] is well made	Baalbaki and Guzman (2016)
9. Structurally attractive	Verhoef, Langerak and Donkers (2007)
10. Good designs	Verhoef, Langerak and Donkers (2007)
11. Model variety	Verhoef, Langerak and Donkers (2007)
12. Paint	Verhoef, Langerak and Donkers (2007)
13. Body integrity	Verhoef, Langerak and Donkers (2007)
14. Assembly	Fetscherin & Toncar (2009)
15. Overlook ability	Fetscherin & Toncar (2009)
16. Trunk-volume	Fetscherin & Toncar (2009)
17. Trunk- accessibility	Fetscherin & Toncar (2009)
18. Trunk- variability	Fetscherin & Toncar (2009)
19. Quality interiors	Fetscherin & Toncar (2009)
20. Interior variability	Fetscherin & Toncar (2009)
21. Interior noise	Fetscherin & Toncar (2009)
22. Driving stability	Fetscherin & Toncar (2009)
23. Corner handling	Fetscherin & Toncar (2009)
24. Steering handling	Fetscherin & Toncar (2009)
25. brakes	Fetscherin & Toncar (2009)
26. Front space	Fetscherin & Toncar (2009)
27. Back space	Fetscherin & Toncar (2009)
28. Good cooling system	Fetscherin & Toncar (2009)
29. Good suspension	Fetscherin & Toncar (2009)
30. Getting in and out of car	Fetscherin & Toncar (2009)
31. Comfort	Kartono & Rao (2005)
Brand Sustainability	
1. [Brand X] is an environmentally safe brand	Baalbaki and Guzman (2016)
2. [Brand X] is an environmentally responsible brand	Baalbaki and Guzman (2016)
3. [Brand X] is a sustainable brand	Baalbaki and Guzman (2016)
4. [Brand X] is a healthy brand	Baalbaki and Guzman (2016)
5. Fuel	Fetscherin & Toncar (2009)
6. Pollutants	Kartono & Rao (2005)

Table 4: Items Adopted for Social Media Marketing Communications

Statements	Sources
Firm-Created Contents	
Social Media Advertising	
1. Offered me something new	Bronner and Neijens (2006)
2. Gave me useful information.	Bronner and Neijens (2006)

3. Gave me credible information	Bronner and Neijens (2006)
4. The advertisements for brand X are creative	Buil, de Chernatony, et al. (2013)
5. The advertisements for brand X are original	Buil, de Chernatony, et al. (2013)
6. The advertisements for brand X are different from that of competing brands	Buil, de Chernatony, et al. (2013)
7. Helped me in forming an opinion	Bronner and Neijens (2006)
8. Irritated me	Bronner and Neijens (2006)
9. Was rather unclear	Bronner and Neijens (2006)
10. Disturbed me	Bronner and Neijens (2006)
11. Made me sad	Bronner and Neijens (2006)
12. Persuaded me	Bronner and Neijens (2006)
Social Media Sales Promotion	
1. Price deals for X are frequently offered	Yoo, Donthu and Lee (2000)
2. Sales incentives	Keller (2009)
3. Product-trial	Keller (2009)
4. Promotion information	Keller (2009)
5. Offers gifts	Keller (2009)
6. Brand X often uses price discount	Buil, de Chernatony, et al. (2013)
7. Offers coupons	Keller (2009)
Social Media Interactive Marketing	
1. Brand Fan pages to contact customers	Keller (2009)
2. Direct contact with brands	Keller (2009)
3. Raise awareness about brands	Keller (2009)
4. Improve images of brands	Keller (2009)
5. Evoke sales of brands	Keller (2009)
6. Link brand's website	Keller (2009)
7. I can exchange my opinion with other customers on social media	Kim & Ko (2012)
8. Social media platforms can be used to share information about the brand	Kim & Ko (2012)
User-Generated Contents	
Social Media Word-of-Mouth	
1. I often read other consumers' online product reviews to know what products/brands make good impressions on others	Jalilvand and Samiei (2012)
2. To make sure I buy the right product/ brand, I often read other consumers' online product reviews	Jalilvand and Samiei (2012)
3. I often consult other consumers' online product reviews to help choose the right product/ brand	Jalilvand and Samiei (2012)
4. I frequently gather information from online consumers' product reviews	Jalilvand and Samiei (2012)

before I buy a certain product/brand	
5. If I don't read consumers' online product reviews when I buy a product/brand, I worry about my decision	Jalilvand and Samiei (2012)
6. When I buy a product/brand, consumers' online product reviews make me confident in purchasing the product/brand	Jalilvand and Samiei (2012)

Table 5 : Items Adopted for Consumer Response

Statements	Sources
Purchase Intention	
1. Brand X is my first choice when it comes to buying a new car or changing my current one	Brunello (2015)
2. If Brand X temporarily off the market, I wouldn't buy another brand, I will wait for it to reappear	Brunello (2015)
3. The probability of re-purchasing Brand X is high	Brunello (2015)
4. The probability of recommending Brand X to others is high	Brunello (2015)
Brand Preference	
5. [Brand X] would be my first choice	Baalbaki and Guzman (2016)
6. I consider myself to be loyal to [Brand X]	Baalbaki and Guzman (2016)
7. I will not buy other brands if [Brand X] is available at the store	Baalbaki and Guzman (2016)
8. I am committed to buying the [Brand X]	Baalbaki and Guzman (2016)

Table 6: Definitions of Consumer Response Constructs

Definitions	Major References
Purchase Intention	
Purchase intention is defined as the conscious intention, plan and effort of a consumer on purchasing a car brand. Purchase intention can be measured with willingness to purchase, repurchase and recommend an automotive brand to others.	Buil, Martínez, & Chernatony, (2013).
Brand Preference	
Brand preference is the consumers' biasness and preference to	Baalbaki &

choosing a car brand among other alternatives based on characteristics of the car brand or the satisfaction, value and quality provided by the brand. Brand preference occurs when consumers do not buy another brand when their preferred brand is not in store. Guzmán (2016).

Table 7: Overall Items Generated from Literature Review and Interview

Statements	Item Codes
Automotive CBBE	
Brand Awareness	
I can recognize the car brand among other car brands.	CBBEBA1
I know what the car brand look like.	CBBEBA2
I can easily recognize the brand name of the car brand.	CBBEBA3
Several characteristics of the car brand instantly come to my mind	CBBEBA4
I easily recognize the symbol/logo of the car brand	CBBEBA5
I am aware of the personality of the car brand	CBBEBA6
The car brand is a well-known brand	CBBEBA7
The car brand is well known globally	CBBEBA8
I know the country-of-origin of the car brand	CBBEBA9
Hedonic Brand Image	
The car brand is desirable	CBBEHBI1
The car brand is strong in personality	CBBEHBI2
The car brand has unique features	CBBEHBI3
The car brand is fashionable	CBBEHBI4
The car brand has reputation for quality	CBBEHBI5
The car brand provides users with a better lifestyle	CBBEHBI6
The car brand provides good value to its users	CBBEHBI7
The car brand improves the way I am perceived by others	CBBEHBI8
The car brand would make a good impression on other people	CBBEHBI9
The car brand would give me social approval	CBBEHBI10
The car brand helps me feel accepted	CBBEHBI11
The car brand makes attractive cars	CBBEHBI12
The car brand makes classy cars	CBBEHBI13
The car brand makes successful cars	CBBEHBI14
The car brand makes fast cars	CBBEHBI15
The car brand makes reliable cars	CBBEHBI16
The car brand makes secure cars	CBBEHBI17
The car brand makes cars that are up to date with the trends of the automotive industry	CBBEHBI18
The car brand makes courageous cars	CBBEHBI19
The car brand makes modern cars	CBBEHBI20
The car brand makes affordable cars	CBBEHBI21
The car brand makes users unique	CBBEHBI22
The car brand befits people in my age group	CBBEHBI23
The car brand has unique colors	CBBEHBI24

Functional Brand Image	
The car brand makes cars with very high engine performance reliability	CBBEFBI1
The car brand makes cars with consistent engine quality	CBBEFBI2
The car brand makes cars with consistent engine performance	CBBEFBI3
The car brand makes cars with acceptable standard of engine quality	CBBEFBI4
The car brand makes cars with very good engine power	CBBEFBI5
The car brand makes cars with good engine transmission	CBBEFBI6
The car brand makes cars with good mechanical quality	CBBEFBI7
The car brand has well made cars	CBBEFBI8
The car brand has structurally attractive cars	CBBEFBI9
The car brand has cars with very good designs	CBBEFBI10
The car brand has cars with very good model variety	CBBEFBI11
The car brand has cars with attractive paint	CBBEFBI12
The car brand has cars with body integrity	CBBEFBI13
The car brand has cars with good body style	CBBEFBI14
The car brand has cars with overlook ability	CBBEFBI15
The car brand has cars with trunk volume	CBBEFBI16
The car brand has cars with trunk accessibility	CBBEFBI17
The car brand has cars with trunk variability	CBBEFBI18
The car brand has cars with interiors that have very good functionalities	CBBEFBI19
The car brand has cars with interiors that are very easy to use	CBBEFBI20
The car brand has cars with beautiful interiors	CBBEFBI21
The car brand has cars with quality interiors	CBBEFBI22
The car brand has cars with interior variability	CBBEFBI23
The car brand has cars with no interior noise	CBBEFBI24
The car brand has cars with good driving stability	CBBEFBI25
The car brand has cars with good corner handling	CBBEFBI26
The car brand has cars with good steering handling	CBBEFBI27
The car brand has cars with firm brakes	CBBEFBI28
The car brand has cars with front space	CBBEFBI29
The car brand has cars with back space	CBBEFBI30
The car brand has cars with good cooling system	CBBEFBI31
The car brand has cars with good suspension	CBBEFBI32
Getting in and out of the cars manufactured by the car brand is easy	CBBEFBI33
The car brand has cars with very good comfort	CBBEFBI34
Brand Sustainability	
The car brand has cars which are environmentally safe	CBBEBS1
The car brand has cars which are environmentally responsible	CBBEBS2
The car brand has sustainable cars	CBBEBS3
The car brand has healthy cars	CBBEBS4
The car brand has cars with efficient fuel usage	CBBEBS5
The car brand is not polluting the environment	CBBEBS6
The car brand has ecofriendly cars	CBBEBS7

Social Media Advertising		
The advertisement on social media offered me something new about the car brand.		SMA1
The advertisement on social media give me useful information about the car brand.		SMA2
The advertisements on social media gave me credible information about the car brand.		SMA3
The advertisements about the car brand on social media are creative		SMA4
The advertisements about the car brand on social media are original		SMA5
The advertisements about the car brand on social media are different from that of competing car brands		SMA6
The advertisements on social media helped me in forming an opinion about the car brand		SMA7
I am persuaded by advertising campaigns of the car brand on social media		SMA8
Social Media Promotion		
Price deals are frequently made on social media by the manufacturer of the car brand		SMP1
Sales incentives are given on social media by the manufacturer of the car brand		SMP2
Product-trial are announced on social media by the manufacturer of the car brand		SMP3
Promotion information are announced on social media by the manufacturer the car brand		SMP4
Gifts are offered in on social media by the manufacturer of the car brand		SMP5
Discounts are offered on social media by the manufacturer of the car brand		SMP6
Coupons are offered on social media by the manufacturer of the car brand		SMP7
Service deals are given on social media by the manufacturer of the car brand		SMP8
I don't believe the sales deals offered on social media by the manufacturer of the car brand		SMP9
Social Media Interactive Marketing		
Brand Fan pages on social media help the manufacturer the car brand to contact customers		SMIM1
Through social media, I have direct contact with the manufacturer of the car brand		SMIM2
Social media is used to raise awareness about the car brand		SMIM3
Social media is used to improve brand images of the car brand		SMIM4
Social media is used to evoke sales of the car brand		SMIM5
Social media can be used to link the website of the car brand		SMIM6
I can exchange my opinion about the car brand with other customers on social media		SMIM7

Social media platforms can be used to share information about the car brand	SMIM8
Social Media Word-of-Mouth	
I often read other consumers' review of the car brand on social media	SMWOM1
I often consult other consumers' review of the car brand on social media	SMWOM2
I often gather information about the car brand from other consumers' review on social media	SMWOM3
Consumers' review on social media helps me make decisions about the car brand	SMWOM4
After consulting consumers' review of the car brand on social media, I am confident about the brand.	SMWOM5
Both positive and negative comments are posted by consumers of the car brand on social media	SMWOM6
Consumer Response	
Purchase Intention	
I consider buying the car brand as my first choice.	CRPI1
If the car brand is temporarily off the market, I wouldn't buy another brand.	CRPI2
There is high probability that I will recommend the car brand to others.	CRPI3
Brand Purchase Intention	
The car brand is my first choice	CRBP1
I consider myself to be loyal to the car brand	CRBP2
I will not buy other car brands if the car brand is not available	CRBP3
I am committed to buying the car brand	CRBP4

Appendix B

Interview Consent Letter

The Effect of Social Media Marketing Communications, Automotive Brand Equity and Consumers Response

I hereby grant Raji Ridwan Adetunji permission to document this interview through audio recording and transcription of the oral interview as part of his PhD research at School of Multimedia Technology and Communication, Universiti Utara Malaysia. The purpose and nature of the interview has been explained to me. On this basis, I agree to participate as a subject in the research, and I consent to publication of the results of the project with the understanding that anonymity will be preserved. I understand also that I may withdraw from the project, including withdrawal of any information I have provided in seven days' time from the interview date.



Signature of the Interviewee

Name

Position/Organization

ID: _____ (This number will be recorded with your data so we can withdraw it at your request)

Appendix C

Interview Guide



The Effect of Social Media Marketing Communications, Automotive Brand Equity and Consumers Response

The interview will focus on opinion of the informants on the definitions and measurements of Automotive Consumer-Based Brand Equity, Social Media Marketing Communications and Consumer Responses

Consumer-Based Brand Equity

Consumer-Based Brand Equity (CBBE), it can be defined as consumers' knowledge (awareness and image), mindsets, judgments and perception of the attributes, quality and performance of a brand (Aaker, 1991; Keller 1993; Keller, 2001).

1. Do you agree with this definition? And why?
2. What is your understanding of Consumer-Based Brand Equity?
3. How would you describe automotive brands?
4. What do you think are important aspect of automotive brands? And why?

According to past studies, Consumer-Based Brand Equity can be measured with (1) Brand Awareness, (2) Functional Brand Image, (3) Hedonic Brand Image and (4) Brand Sustainability.

5. Will you please explain how much these attributes are true about automotive brands? And how?
6. Item of CBBE generated from literature will be shown to the respondent and the respondent will be asked: What items are not relevant to automotive brands? And why? – **The items pulled from literature are shown to informants**

Social Media Marketing Communications

Lately, brand-related communications are being disseminated on social media including; *Facebook, Twitter, YouTube* and *Instagram* by both brand-managers and consumers of brands.

7. Do you agree with this fact? And why?
8. How can you describe marketing communications on social media?
9. What are the types of brand-related communications posted by brand managers or brand owners that ever seen or read on social media?
10. What are the types of brand-related communications posted by brand consumers or brand fans that ever seen or read on social media?

<p>11. What items are not relevant to social media marketing communications? And why? – <u>Informants are shown the pulled items from literature</u></p>
<p align="center">Consumer Responses</p>
<p>Consumer responses refers consumers’ attitude, behavior and reactions towards a brand. these behaviors and attitudes can be influenced by either marketing communication efforts or the value of a brand (Buil, Martinez and Chernatony, 2013)</p> <p>12. Do you agree with this definition? And why?</p> <p>13. What is your understanding of consumer responses?</p> <p>According to past studies, consumer responses can be measured as (1) purchase intention and (2) brand preference.</p> <p>14. Will you please explain how much these attributes are true about consumer responses? And how?</p> <p>15. Item for measuring consumer responses are generated from literature. What items are not relevant to consumer responses? And why? – <u>Items pulled from literature are shown to informants</u></p>
<p align="center">SUMMARY</p>
<p>16. The interviewer will summarize the key points of the interview. At this juncture, the proposed conceptual framework generated from the literature will be shown. Then, the interviewer will ask if the respondents have any changes or additions? –<u>The proposed Theoretical Framework is shown to informants</u></p>
<p>17. The main goals of this interview are: to examine the types of social media marketing communications that influence consumer-based brand equity and consumer responses to automotive brands from your perspective. Are there any other points that you would like to add?</p>
<p align="center">Thank you so much for your kind cooperation and valuable time.</p>

Appendix D Content Validity Form



Dear Sir/Ma,

We seek your kind help to provide feedback on the items included in the questionnaire of the study entitled; **The Effect of Social Media Marketing Communications on Automotive Consumer-Based Brand Equity and Consumer Responses**. The objective of this research in broad terms is to examine the effects of social media marketing communications on CBBE and consumer responses. Below are the specific research objectives:

1. To determine the factors for measuring automotive CBBE.
2. To examine the differential effects of social media marketing communications on automotive consumer-based brand equity.
3. To determine the differential effects of social media marketing communications on consumer responses (purchase intention and brand preference).
4. To examine the effects of automotive CBBE on consumer responses (purchase intention and brand preference).

Kindly rate the items of the questionnaire base on their representativeness and clarity. Also, we would appreciate it if you could put some remarks in the comment section provided in the attached questionnaire.

If you require further information about this research, please contact:

Researcher:

Raji Ridwan Adetunji,
School of Multimedia Technology and Communication,
UUM, Sintok, Kedah, Malaysia.
Email: rajiridwanadetunji@gmail.com

Main Supervisor:

Dr Sabrina Binti Mohd Rashid
School of Multimedia Technology and Communication,
UUM, Sintok, Kedah, Malaysia.

Co-Supervisor:

Dr Mohd Sobhi Bin Ishak
School of Multimedia Technology and Communication,
UUM, Sintok, Kedah, Malaysia.

Name:

Designation:

Institution:

Experience in Marketing Communication/ Research Area: years

Highest Academic Degree:

Automotive Consumer-Based Brand Equity

Kindly evaluate the following items based on their relevancy for measuring the concept of consumer-based brand equity of automotive brand. The items will be distributed to respondents to rate their agreement or disagreement on their favourite car brand (e.g, PROTON, PERODUA, TOYOTA, HONDA, etc) using a Likert-type scale. Finally, comment boxes are provided after the survey for your overall comments and specific comments on any of the items.

Definitions	Major References
Automotive CBBE	
Automotive CBBE is defined as consumers' knowledge and perceptions of the brand awareness, functional brand image, hedonic brand image and brand sustainability of car brands.	Bruhn, Schoenmueller & Schafer (2012) and Baalbaki and Guzman (2016).
Brand Awareness	
Brand awareness is the easy and spontaneous occurrence of a car brand in consumer's memory when thinking of buying or engaging with a category of car brands. Brand awareness is determined with the recall and recognition of automotive brand.	Bruhn, Schoenmueller & Schafer (2012)
Functional Brand Image	
Functional brand image signifies consumers' perceptions of the performance of engine, interiors, body structure and comfort of an automotive brand.	Bruhn, Schoenmueller & Schafer (2012)
Hedonic Brand Image	
Hedonic brand image can be explained as the perceptions, feelings, or meaning that consumers created from abstract and imagery-related considerations that are not necessarily related to the functional attributes, performance and utilitarian of an automotive brand. This can be referred as the personality, social value and brand leadership of an automotive brand	Bruhn, Schoenmueller & Schafer (2012).
Brand Sustainability	
Brand sustainability refers to consumers' judgments and awareness of an automotive brands' consciousness and mindfulness to safety, health, environmental and financial sustainability.	Baalbaki & Guzmán (2016)

Please use the following scales to rate relevance of the items below.

1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, 4 = highly relevant.

Kindly base your responses to the following statements on your favourite car brand.

S/N	Brand Awareness	Relevance			
1	I can recognize the car brand among other car brands.	1	2	3	4
2	I know what the car brand look like.	1	2	3	4
3	I can easily recognize the brand name of the car brand.	1	2	3	4
4	Several characteristics of the car brand instantly come to my mind	1	2	3	4
5	I easily recognize the symbol/logo of the car brand	1	2	3	4
6	I am aware of the personality of the car brand	1	2	3	4
7	The car brand is a well-known brand	1	2	3	4
8	The car brand is well known globally	1	2	3	4
9	I know the country-of-origin of the car brand	1	2	3	4
Hedonic Brand Image		Relevance			
11	The car brand is desirable	1	2	3	4
12	The car brand is strong in personality	1	2	3	4
13	The car brand has unique features	1	2	3	4
14	The car brand is fashionable	1	2	3	4
15	The car brand has reputation for quality	1	2	3	4
16	The car brand provides users with a better lifestyle	1	2	3	4
17	The car brand provides good value to its users	1	2	3	4
18	The car brand improves the way I am perceived by others	1	2	3	4
19	The car brand would make a good impression on other people	1	2	3	4
20	The car brand would give me social approval	1	2	3	4
21	The car brand helps me feel accepted	1	2	3	4
22	The car brand makes attractive cars	1	2	3	4
23	The car brand makes classy cars	1	2	3	4
24	The car brand makes successful cars	1	2	3	4
25	The car brand makes fast cars	1	2	3	4
26	The car brand makes reliable cars	1	2	3	4
27	The car brand makes secure cars	1	2	3	4
28	The car brand makes cars that are up to date with the trends of the automotive industry	1	2	3	4
29	The car brand makes courageous cars	1	2	3	4
30	The car brand makes modern cars	1	2	3	4
31	The car brand makes affordable cars	1	2	3	4
32	The car brand makes users unique	1	2	3	4
33	The car brand befits people in my age group	1	2	3	4
34	The car brand has unique colors	1	2	3	4
Functional Brand Image		Relevance			
35	The car brand makes cars with very high engine performance reliability	1	2	3	4
36	The car brand makes cars with consistent engine quality	1	2	3	4
37	The car brand makes cars with consistent engine performance	1	2	3	4
38	The car brand makes cars with acceptable standard of	1	2	3	4

	engine quality				
39	The car brand makes cars with very good engine power	1	2	3	4
40	The car brand makes cars with good engine transmission	1	2	3	4
41	The car brand makes cars with good mechanical quality	1	2	3	4
42	The car brand has well made cars	1	2	3	4
43	The car brand has structurally attractive cars	1	2	3	4
44	The car brand has cars with very good designs	1	2	3	4
45	The car brand has cars with very good model variety	1	2	3	4
46	The car brand has cars with attractive paint	1	2	3	4
47	The car brand has cars with body integrity	1	2	3	4
48	The car brand has cars with good body style	1	2	3	4
49	The car brand has cars with overlook ability	1	2	3	4
50	The car brand has cars with trunk volume	1	2	3	4
51	The car brand has cars with trunk accessibility	1	2	3	4
52	The car brand has cars with trunk variability	1	2	3	4
53	The car brand has cars with interiors that have very good functionalities	1	2	3	4
54	The car brand has cars with interiors that are very easy to use	1	2	3	4
55	The car brand has cars with beautiful interiors	1	2	3	4
56	The car brand has cars with quality interiors	1	2	3	4
57	The car brand has cars with interior variability	1	2	3	4
58	The car brand has cars with no interior noise	1	2	3	4
59	The car brand has cars with good driving stability	1	2	3	4
60	The car brand has cars with good corner handling	1	2	3	4
61	The car brand has cars with good steering handling	1	2	3	4
62	The car brand has cars with firm brakes	1	2	3	4
63	The car brand has cars with front space	1	2	3	4
64	The car brand has cars with back space	1	2	3	4
65	The car brand has cars with good cooling system	1	2	3	4
66	The car brand has cars with good suspension	1	2	3	4
67	Getting in and out of the cars manufactured by the car brand is easy	1	2	3	4
68	The car brand has cars with very good comfort	1	2	3	4
	Brand Sustainability		Relevance		
69	The car brand has cars which are environmentally safe	1	2	3	4
70	The car brand has cars which are environmentally responsible	1	2	3	4
71	The car brand has sustainable cars	1	2	3	4
72	The car brand has healthy cars	1	2	3	4
73	The car brand has cars with efficient fuel usage	1	2	3	4
74	The car brand is not polluting the environment	1	2	3	4

Comments on items (<i>Please specify the item</i>):	
Overall comments of the entire measure	

Social Media Marketing Communications

Kindly evaluate the following items based on their relevance in measuring the concept of social media marketing communications and its dimensions. The items will be distributed to respondents who are users of social media to examine their opinion on the influence of marketing communications on social media towards the development of automotive CBBE. Finally, comment boxes are provided after the survey for your overall comments and specific comments on any of the items.

Definitions	Major References
Firm-Created Contents	
Social Media Advertising	
Social media advertising is creative, entertaining and brand related-information that are posted by brand owners on social media platforms to promote brands, increase awareness and evoke brand purchase.	Keller (2009)
Social Media Sales Promotions	
Social media sales promotion is both monetary and non-monetary sales promotions that are anchored on social media platforms. Monetary sales promotion refers to using and offering price discounts and coupons. Non-monetary sales promotions referred to offering gifts and product trails on social media.	Keller (2009)
Social Media Interactive Marketing	
Marketing activities or messages that are disseminated on social media platforms to engage real or prospective consumers and directly or indirectly raise awareness, improve connection between brand and consumers or elicit sales of products and services.	Keller (2009)
User Generated Contents	
Social Media Word-of-Mouth	
Social media word-of-mouth are consumers' evaluations, reviews and usage experiences of a product that are disseminated among multitude of customers	Keller (2009)

on social media platforms.

Please use the following scales to rate relevance of the items below.

1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, 4 = highly relevant.

S/N	Social Media Advertising	Relevance			
1	The advertisement on social media offered me something new about the car brand.	1	2	3	4
2	The advertisement on social media give me useful information about the car brand.	1	2	3	4
3	The advertisements on social media gave me credible information about the car brand.	1	2	3	4
4	The advertisements about the car brand on social media are creative	1	2	3	4
5	The advertisements about the car brand on social media are original	1	2	3	4
6	The advertisements about the car brand on social media are different from that of competing car brands	1	2	3	4
7	The advertisements on social media helped me in forming an opinion about the car brand	1	2	3	4
8	I am persuaded by advertising campaigns of the car brand on social media	1	2	3	4
Social Media Sales Promotion		Relevance			
9	Price deals are frequently made on social media by the manufacturer of the car brand	1	2	3	4
10	Sales incentives are given on social media by the manufacturer of the car brand	1	2	3	4
11	Product-trial are announced on social media by the manufacturer of the car brand	1	2	3	4
12	Promotion information are announced on social media by the manufacturer the car brand	1	2	3	4
13	Gifts are offered in on social media by the manufacturer of the car brand	1	2	3	4
14	Discounts are offered on social media by the manufacturer of the car brand	1	2	3	4
15	Coupons are offered on social media by the manufacturer of the car brand	1	2	3	4
16	Service deals are given on social media by the manufacturer of the car brand	1	2	3	4
17	I don't believe the sales deals offered on social media by the manufacturer of the car brand	1	2	3	4
Social Media Interactive Marketing		Relevance			
18	Brand Fan pages on social media help the manufacturer the car brand to contact customers	1	2	3	4

19	Through social media, I have direct contact with the manufacturer of the car brand	1	2	3	4
20	Social media is used to raise awareness about the car brand	1	2	3	4
21	Social media is used to improve brand images of the car brand	1	2	3	4
22	Social media is used to evoke sales of the car brand	1	2	3	4
23	Social media can be used to link the website of the car brand	1	2	3	4
24	I can exchange my opinion about the car brand with other customers on social media	1	2	3	4
25	Social media platforms can be used to share information about the car brand	1	2	3	4
Social Media Word-of-Mouth		Relevance			
26	I often read other consumers' review of the car brand on social media	1	2	3	4
27	I often consult other consumers' review of the car brand on social media	1	2	3	4
28	I often gather information about the car brand from other consumers' review on social media	1	2	3	4
29	Consumers' review on social media helps me make decisions about the car brand	1	2	3	4
30	After consulting consumers' review of the car brand on social media, I am confident about the brand.	1	2	3	4
31	Both positive and negative comments are posted by consumers of the car brand on social media	1	2	3	4
32	I am encouraged to buy the car brand by what social media friends are saying about it	1	2	3	4
33	The car brand is recommended to me on social media	1	2	3	4
34	I am a fan of the car brand on social media	1	2	3	4

Comments on items (Please specify the item):	
Overall comments of the entire measure	

Consumer Responses	
<p>Kindly evaluate the following items based on their relevance in measuring the concept of consumer responses in forms of purchase intention and brand preference. The items will be distributed to respondents who are users of social media and automotive brands to examine their responses towards marketing communications on social media and the development of automotive CBBE. Finally, comment boxes are provided after the survey for your overall comments and specific comments on any of the items.</p>	
Definitions	Major References
Purchase Intention	
Purchase intention is defined as the conscious intention, plan and effort of a consumer on purchasing a car brand. Purchase intention can be measured with willingness to purchase, repurchase and recommend a car brand to others.	Buil, Martínez, & Chernatony, (2013).
Brand Preference	
Brand preference is the consumers' biasness and preference to choosing a car brand among other alternatives based on characteristics of the car brand or the satisfaction, value and quality provided by the brand. Brand preference occurs when consumers do not buy another brand when their preferred brand is not in store.	(Çifci et al., 2016).

Please use the following scales to rate relevance of the items below.

1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, 4 = highly relevant.

S/N	Purchase Intention	Relevance			
1	I consider buying the car brand as my first choice.	1	2	3	4
2	If the car brand is temporarily off the market, I wouldn't buy another brand.	1	2	3	4
3	There is high probability that I will recommend the car brand to others.	1	2	3	4
Brand Preference		Relevance			
4	The car brand is my first choice	1	2	3	4
5	I consider myself to be loyal to the car brand	1	2	3	4
6	I will not buy other car brands if the car brand is not available	1	2	3	4
7	I am committed to buying the car brand	1	2	3	4

Appendix E

Results of Content Validity Index (CVI)

Item-Level and Scale-Level CVIs for Automotive CBBE

Items	Experts							Item-Level CVI
	1	2	3	4	5	6	7	
CBBEBA1	4	4	4	3	3	4	4	7/7=1.00
CBBEBA2	4	4	4	4	4	4	4	7/7=1.00
CBBEBA3	4	4	4	4	4	4	3	7/7=1.00
CBBEBA4	4	4	4	4	3	4	3	7/7=1.00
CBBEBA5	4	4	4	4	4	4	3	7/7=1.00
CBBEBA6	2	4	3	4	4	4	3	6/7=0.85
CBBEBA7	2	4	4	4	4	4	4	6/7=0.85
CBBEBA8	2	4	1	4	4	4	4	5/7=0.71
CBBEBA9	1	4	4	4	4	4	4	6/7=0.85
CBBEHBI1	4	4	4	4	3	4	3	7/7=1.00
CBBEHBI2	2	4	4	4	4	4	4	6/7=0.85
CBBEHBI3	2	4	4	4	4	4	4	6/7=0.85
CBBEHBI4	4	4	3	4	4	4	4	7/7=1.00
CBBEHBI5	4	4	4	4	4	4	4	7/7=1.00
CBBEHBI6	4	4	4	4	4	4	4	7/7=1.00
CBBEHBI7	4	4	4	4	4	4	4	7/7=1.00
CBBEHBI8	4	4	3	4	4	4	3	7/7=1.00
CBBEHBI9	4	4	3	3	4	4	3	7/7=1.00
CBBEHBI10	4	4	4	3	3	4	3	7/7=1.00
CBBEHBI11	4	4	3	3	3	4	3	7/7=1.00
CBBEHBI12	4	1	2	3	4	4	3	5/7=0.71
CBBEHBI13	1	4	2	3	3	4	3	5/7=0.71
CBBEHBI14	1	4	1	3	4	4	3	5/7=0.71
CBBEHBI15	4	4	2	3	4	4	3	6/7=0.85
CBBEHBI16	4	4	3	3	4	4	4	7/7=1.00
CBBEHBI17	4	4	3	3	3	4	4	7/7=1.00
CBBEHBI18	4	4	3	3	4	4	4	7/7=1.00
CBBEHBI19	2	1	2	3	4	4	3	4/7=0.57
CBBEHBI20	2	4	3	3	4	4	3	6/7=0.85
CBBEHBI21	2	4	4	3	3	4	3	6/7=0.85
CBBEHBI22	1	4	1	3	4	4	3	5/7=0.71
CBBEHBI23	1	4	4	3	3	4	2	5/7=0.71
CBBEHBI24	1	4	1	3	4	4	3	5/7=0.71
CBBEFBI1	3	4	4	3	4	4	4	7/7=1.00
CBBEFBI2	3	3	4	3	4	4	3	7/7=1.00
CBBEFBI3	3	3	4	3	4	4	4	7/7=1.00
CBBEFBI4	3	3	4	3	4	4	4	7/7=1.00
CBBEFBI5	4	4	4	3	4	4	4	7/7=1.00
CBBEFBI6	4	4	4	3	4	4	3	7/7=1.00
CBBEFBI7	4	3	4	3	4	4	4	7/7=1.00
CBBEFBI8	4	4	4	3	4	4	3	7/7=1.00

CBBEFBI9	1	4	3	3	4	4	3	6/7=0.85
CBBEFBI10	3	4	4	3	4	4	4	7/7=1.00
CBBEFBI11	1	4	4	3	4	4	4	6/7=0.85
CBBEFBI12	1	4	4	3	4	4	4	6/7=0.85
CBBEFBI13	1	4	1	3	4	4	3	6/7=0.85
CBBEFBI14	1	4	4	3	4	4	4	6/7=0.85
CBBEFBI15	1	4	4	3	4	3	2	6/7=0.85
CBBEFBI16	1	4	1	3	4	4	3	6/7=0.85
CBBEFBI17	1	4	3	3	4	4	3	6/7=0.85
CBBEFBI18	1	4	3	3	4	4	3	6/7=0.85
CBBEFBI19	4	4	3	3	4	4	3	7/7=1.00
CBBEFBI20	4	4	4	3	4	4	4	7/7=1.00
CBBEFBI21	4	4	4	3	4	4	3	7/7=1.00
CBBEFBI22	4	3	4	3	4	4	4	7/7=1.00
CBBEFBI23	4	4	4	3	4	4	4	7/7=1.00
CBBEFBI24	4	4	4	3	4	4	3	7/7=1.00
CBBEFBI25	4	4	4	3	4	4	4	7/7=1.00
CBBEFBI26	4	4	4	3	4	4	4	7/7=1.00
CBBEFBI27	4	4	4	3	4	4	4	7/7=1.00
CBBEFBI28	1	4	4	3	4	4	3	6/7=0.85
CBBEFBI29	4	4	4	3	4	4	3	7/7=1.00
CBBEFBI30	4	4	4	3	4	4	3	7/7=1.00
CBBEFBI31	4	4	4	3	4	4	3	7/7=1.00
CBBEFBI32	4	4	4	3	4	4	4	7/7=1.00
CBBEFBI33	1	4	4	3	4	4	3	6/7=0.85
CBBEFBI34	4	4	4	3	4	4	3	7/7=1.00
CBBEBS1	4	4	4	3	4	4	2	6/7=0.85
CBBEBS2	4	4	4	3	4	4	3	7/7=1.00
CBBEBS3	4	4	4	3	4	4	3	7/7=1.00
CBBEBS4	1	3	4	3	4	4	4	6/7=0.85
CBBEBS5	4	4	3	3	4	4	3	7/7=1.00
CBBEBS6	4	4	4	3	4	4	4	7/7=1.00
CBBEBS7	4	4	4	3	4	4	3	7/7=1.00
Proportion Relevant:	0.65	0.97	0.86	1	1	1	0.95	S-CVI/Ave = 6.43/7 = 0.91

Item-Level and Scale-Level CVIs for Social Media Marketing Communications

Items	Experts							Item-Level CVI
	1	2	3	4	5	6	7	
SMA1	4	4	1	3	4	4	3	7/7=1.00
SMA2	4	4	4	3	4	4	3	7/7=1.00
SMA3	4	4	4	3	4	4	3	7/7=1.00
SMA4	4	4	4	3	4	4	3	7/7=1.00
SMA5	4	4	4	3	4	4	3	7/7=1.00
SMA6	4	4	4	3	4	4	3	7/7=1.00
SMA7	4	4	4	3	4	4	3	7/7=1.00
SMA8	4	4	4	3	4	3	3	7/7=1.00
SMP1	4	4	4	3	4	4	2	6/7=0.85
SMP2	4	4	4	3	3	4	4	7/7=1.00
SMP3	4	4	4	3	4	4	2	6/7=0.85
SMP4	4	4	4	3	4	4	2	6/7=0.85

SMP5	4	4	4	3	4	4	3	7/7=1.00
SMP6	4	4	4	3	4	4	3	7/7=1.00
SMP7	4	4	4	3	4	4	3	7/7=1.00
SMP8	4	4	4	3	4	4	2	6/7=0.85
SMP9	4	4	4	3	4	4	1	6/7=0.85
SMIM1	4	4	4	3	4	4	1	6/7=0.85
SMIM2	4	4	4	3	4	4	3	7/7=1.00
SMIM3	4	4	4	3	4	4	1	6/7=0.85
SMIM4	4	4	4	3	4	4	4	7/7=1.00
SMIM5	4	4	4	3	4	4	3	7/7=1.00
SMIM6	4	4	4	3	4	4	3	7/7=1.00
SMIM7	4	4	4	3	4	4	2	6/7=0.85
SMIM8	4	4	4	3	4	4	2	6/7=0.85
SMWOM1	4	4	4	3	4	4	3	7/7=1.00
SMWOM2	4	4	4	3	4	4	3	7/7=1.00
SMWOM3	4	4	4	3	4	4	3	7/7=1.00
SMWOM4	4	4	4	3	4	4	3	7/7=1.00
SMWOM5	4	4	4	3	4	4	2	6/7=0.85
SMWOM6	4	4	4	3	4	4	3	7/7=1.00
SMWOM7	4	4	4	3	4	4	4	7/7=1.00
SMWOM8	4	4	4	3	3	4	3	7/7=1.00
SMWOM9	4	4	4	3	4	4	3	7/7=1.00
Proportion Relevant:	1	1	0.97	1	1	1	0.70	S-CVI/Ave = 6.67/7 = 0.95

Item-Level and Scale-Level CVIs for Consumer Response

Items	Experts							Item-Level CVI
	1	2	3	4	5	6	7	
CRPI1	4	4	4	4	4	4	3	7/7=1.00
CRPI2	4	4	4	4	4	4	3	7/7=1.00
CRPI3	4	4	4	4	4	4	2	6/7=0.85
CRBP1	4	4	4	4	4	4	3	7/7=1.00
CRBP2	4	4	4	4	4	4	3	7/7=1.00
CRBP3	4	4	4	4	4	4	4	7/7=1.00
CRBP4	4	4	4	4	4	4	4	7/7=1.00
Proportion Relevant:	1	1	1	1	1	1	0.85	S-CVI/Ave = 6.85/7 = 0.97

Appendix F

Survey Introduction Letter



PUSAT PENGAJIAN TEKNOLOGI MULTIMEDIA DAN KOMUNIKASI
SCHOOL OF MULTIMEDIA TECHNOLOGY AND COMMUNICATION
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel: 604-928 5801
Faks (Fax): 604-928 5804
Laman Web (Web): <http://www.smmtc.uum.edu.my>

28 November 2016

TO WHOM IT MAY CONCERN

REQUEST FOR YOUR ATTENTION AS MARKETING/BRAND MANAGER FOR AUTOMOTIVE COMPANY IN MALAYSIA

Mr. Raji Ridwan Adetunji (Matric Number: 900764) is a graduate student under my supervision in School of Multimedia Technology and Communication, Universiti Utara Malaysia.

As part of his Doctor of Philosophy (PhD) research work, he will be conducting a semi structured interview to explore your perception of social media marketing communications, automotive brand equity and consumer responses. He is currently developing measurements for these constructs to investigate the effects of social media marketing communications on automotive brand equity and consumer responses. As such, your co-operation is highly important and appreciated.

I will be glad if he is given the adequate support and attention in order for him to get the information needed. Your responses will be treated with utmost confidentiality and for the purpose of this research only.

Principal Researcher: Raji Ridwan Adetunji (rajiridwanadetunji@gmail.com)

Main Supervisor: Dr Sabrina Mohd Rashid (sabrina@uum.edu.my)

Co Supervisor: Dr Sobhi Mohd Ishak (msobhi@uum.edu.my)

Yours Faithfully,

Sabrina Mohd Rashid, PhD
School of Multimedia Technology and Communication,
College of Arts and Science,
Universiti Utara Malaysia.

Appendix G

Survey Questionnaire



Dear Sir/Madam,

The main objective of this research is to examine the effects of social media marketing communications on brand equity of Automotive Brands and consumer responses. Kindly be assured that, your responses will be used strictly for academic purposes. Also, your identity will not be revealed throughout the process of the study. The survey will take about 10 minutes of your time.

Thank you very much in anticipation of your responses. If you require additional information about this research, kindly contact any of the following:

Researcher:

Raji Ridwan Adetunji,
School of Multimedia Technology and Communication,
UUM, Sintok, Kedah, Malaysia.
Email: rajiridwanadetunji@gmail.com

Main Supervisor:

Dr Sabrina Binti Mohd Rashid
School of Multimedia Technology and Communication,
UUM, Sintok, Kedah, Malaysia.

Co-Supervisor:

Dr Mohd Sobhi Bin Ishak
School of Multimedia Technology and Communication,
UUM, Sintok, Kedah, Malaysia.

SECTION A: DEMOGRAPHIC AND BASIC INFORMATION

Instruction: Please tick ☒ at the appropriate box.

S/N	Demographic Information
1	Gender <input type="checkbox"/> Male <input type="checkbox"/> Female
2	Age <input type="checkbox"/> Less than 25 years <input type="checkbox"/> 26 to 35 years <input type="checkbox"/> 36 to 45 years <input type="checkbox"/> 45years and Above
3	Your highest level of education <input type="checkbox"/> Diploma <input type="checkbox"/> Bachelor's Degree <input type="checkbox"/> Master's Degree <input type="checkbox"/> PhD <input type="checkbox"/> Others (please specify): _____
4	Ethnicity <input type="checkbox"/> Melayu <input type="checkbox"/> Chinese <input type="checkbox"/> Indian <input type="checkbox"/> Others (please specify): _____
5	On which of the following social media do you follow BRAND X (You can pick more than one)? <input type="checkbox"/> Facebook <input type="checkbox"/> Twitter <input type="checkbox"/> YouTube <input type="checkbox"/> Instagram <input type="checkbox"/> Others (please specify): _____
6	Which of the following marketing communications have you ever watched/read/listened to on social media (You can pick more than one)? <input type="checkbox"/> Advertisement <input type="checkbox"/> Promotions <input type="checkbox"/> Direct Marketing <input type="checkbox"/> Word-of-Mouth

SECTION B: Automotive Consumer-Based Brand Equity (CBBE)

disagreement on the statements based on your perception of BRAND X using the scores from '1' to '5'.

	1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree
Brand Awareness					
1	I can recognize BRAND X among other car brands.				
2	I know what BRAND X cars looks like.				
3	I can easily recognize the names of BRAND X cars.				
4	Several specifications of BRAND X instantly come to my mind				
5	I can easily recognize the symbol/logo of BRAND X				
6	I am aware of the personality of BRAND X cars				
7	BRAND X is a well-known automotive brand				
8	I know the country-of-origin of BRAND X				
Hedonic Brand Image					
1	BRAND X is desirable				
2	BRAND X has unique features				
3	BRAND X provides excellent value to its users				
4.	BRAND X improves the way I am perceived by others				
5.	BRAND X would give me social approval				
6.	BRAND X makes fast cars				
7.	BRAND X makes reliable cars				
Functional Brand Image					
1.	BRAND X makes cars with very high engine performance reliability				
2	BRAND X makes cars with consistent engine performance				
3	BRAND X makes cars with acceptable standard of engine quality				
4	BRAND X cars with very good engine power				
5	BRAND X makes cars with good engine transmission				
6	BRAND X makes cars with good mechanical quality				
7	BRAND X has structurally attractive cars				
8	BRAND X has cars with very good designs				
9	BRAND X has cars with very good model variety				
10	BRAND X has cars with attractive paint				
11	BRAND X has cars with good body style				
12	BRAND X has cars with overlook ability				
13	BRAND X has cars with trunk/boot volume				
14	BRAND X has cars with trunk/boot accessibility				
15	BRAND X has cars with interiors that have very good functionalities				
16	BRAND X has cars with interiors that are very easy to use				
17	BRAND X has cars with beautiful interiors				
18	BRAND X has cars with quality interiors				
19	BRAND X has cars with no interior noise				
20	BRAND X has cars with good driving stability				
21	BRAND X has cars with good steering handling				

22	BRAND X has cars with firm brakes	1	2	3	4	5
23	BRAND X has cars with good cooling system	1	2	3	4	5
24	BRAND X has cars with good suspension	1	2	3	4	5
Brand Sustainability						
1	BRAND X has cars which are environmentally safe	1	2	3	4	5
2	BRAND X has cars which are environmentally responsible	1	2	3	4	5
3	BRAND X has healthy cars	1	2	3	4	5
4	BRAND X has cars with efficient fuel usage	1	2	3	4	5
5	BRAND X cars do not pollute the environment	1	2	3	4	5
6	BRAND X has ecofriendly cars	1	2	3	4	5
7	BRAND X has cars with low cost of maintenance	1	2	3	4	5
8	It is easy to get the spare parts of BRAND X cars	1	2	3	4	5

SECTION C: Social Media Marketing Communications

perception of BRAND X's marketing activities on social media using the scores from '1' to '5'.

1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree				
Social Media Advertising								
1	BRAND X's advertisements on social media offered me something new about BRAND X.			1	2	3	4	5
2	BRAND X's advertisements on social media give me useful information about BRAND X.			1	2	3	4	5
3	BRAND X's advertisements on social media give me credible information about BRAND X.			1	2	3	4	5
4	BRAND X's advertisements on social media are creative			1	2	3	4	5
5	BRAND X's advertisements on social media are original			1	2	3	4	5
6	BRAND X's advertisements on social media are different from other competing car brands			1	2	3	4	5
7	BRAND X's advertisements on social media helped me in forming an opinion about BRAND X			1	2	3	4	5
8	I am persuaded by advertising campaigns of BRAND X on social media			1	2	3	4	5
Social Media Promotion								
1	Price deals are frequently made on social media by BRAND X			1	2	3	4	5
2	Price reductions are given on social media by BRAND X			1	2	3	4	5
3	Product-trials are announced on social media by BRAND X			1	2	3	4	5
4	Promotion information are announced on social media by BRAND X			1	2	3	4	5
5	Gifts are offered in on social media by BRAND X			1	2	3	4	5
6	Discounts/rebates are offered on social media by BRAND X			1	2	3	4	5
7	Coupons are offered on social media by BRAND X			1	2	3	4	5
8	Service deals are given on social media by BRAND X			1	2	3	4	5
Social Media Interactive Marketing								

1	Social media is used to raise awareness about BRAND X	1	2	3	4	5
2	Social media is used to improve BRAND X's brand images	1	2	3	4	5
3	Social media is used to evoke sales of BRAND X's cars.	1	2	3	4	5
4	Social media can be used to link BRAND X's website	1	2	3	4	5
5	I can exchange my opinion about BRAND X with other customers on social media	1	2	3	4	5
Social Media Word-of-Mouth						
1	I often consult other consumers' review of BRAND X on social media	1	2	3	4	5
2	I often gather information about BRAND X from other consumers' review on social media	1	2	3	4	5
3	Consumers' review on social media helps me make decisions BRAND X	1	2	3	4	5
4	After consulting consumers' review of BRAND X on social media, I am confident about BRAND X.	1	2	3	4	5
5	Both positive and negative comments are posted by consumers of BRAND X on social media	1	2	3	4	5
6	I am encouraged to buy BRAND X car by what social media users are posting about BRAND X	1	2	3	4	5
7	BRAND X is recommended to me on social media	1	2	3	4	5

SECTION D: Consumer Response

Kindly base your agreement or disagreement on the following statements based on opinion towards the effect of social media marketing activities of BRAND X on your behavior using the scores from '1' to '5'.

1 = Strongly Disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly Agree					
1	I consider buying BRAND X as my first choice.				1	2	3	4	5
2	If BRAND X is temporarily off the market, I wouldn't buy another brand.				1	2	3	4	5
3	There is high probability that I will recommend BRAND X to others.				1	2	3	4	5
4	BRAND X is my first choice				1	2	3	4	5
5	I consider myself to be loyal to BRAND X				1	2	3	4	5
6	I will not buy other car brands if BRAND X is not available				1	2	3	4	5
7	I am committed to buying BRAND X				1	2	3	4	5

-Thank you for your co-operations-

Appendix H AMOS Output

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
CBB_E <--- SMA	.245	.027	8.991	***	par_1
CBB_E <--- SMIM	-.107	.032	-3.296	***	par_2
CBB_E <--- SMP	.220	.029	7.561	***	par_3
CBB_E <--- SWOM	.265	.030	8.835	***	par_4
CR <--- CBB_E	1.030	.084	12.238	***	par_5
CR <--- SMA	-.145	.057	-2.533	.011	par_12
CR <--- SMIM	-.154	.064	-2.394	.017	par_13
CR <--- SMP	.210	.060	3.499	***	par_14
CR <--- SWOM	.209	.063	3.323	***	par_15

Standardized Regression Weights: (Group number 1 - Default model)

	Estimate
CBB_E <--- SMA	.369
CBB_E <--- SMIM	-.145
CBB_E <--- SMP	.335
CBB_E <--- SWOM	.344
CR <--- CBB_E	.633
CR <--- SMA	-.135
CR <--- SMIM	-.128
CR <--- SMP	.196
CR <--- SWOM	.167

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
SMA <--> SMIM	.273	.019	14.312	***	par_6
SMA <--> SMP	.292	.021	13.884	***	par_7
SMA <--> SWOM	.234	.018	13.319	***	par_8
SMIM <--> SMP	.277	.019	14.359	***	par_9
SMIM <--> SWOM	.215	.016	13.489	***	par_10
SMP <--> SWOM	.258	.018	14.096	***	par_11

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
CBB_E	.693
CR	.554

First Bootstrapping

Direct Effects (Group number 1 - Default model)

Direct Effects - Lower Bounds (BC) (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA
CR	.353	.326	-.394	.002

Direct Effects - Upper Bounds (BC) (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA
CR	.605	.549	-.130	.217

Direct Effects - Two Tailed Significance (BC) (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA
CR	.001	.001	.004	.090

Direct Effects (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA
CR	.483	.437	-.264	.107

Second Bootstrapping

Standardized Indirect Effects (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA	CBB_E
CBB_E	.000	.000	.000	.000	.000
CR	.218	.212	-.092	.234	.000

Total Effects (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA	CBB_E
CBB_E	.265	.220	-.107	.245	.000
CR	.483	.437	-.264	.107	1.030

Standardized Indirect Effects (Group number 1 - Default model)

Standardized Indirect Effects - Lower Bounds (BC) (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA	CBB_E
CBB_E	.000	.000	.000	.000	.000
CR	.160	.143	-.159	.166	.000

Standardized Indirect Effects - Upper Bounds (BC) (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA	CBB_E
CBB_E	.000	.000	.000	.000	.000
CR	.282	.292	-.037	.313	.000

Standardized Indirect Effects - Two Tailed Significance (BC) (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA	CBB_E
CBB_E
CR	.001	.001	.001	.001	...

Standardized Direct Effects (Group number 1 - Default model)

	SWOM	SMP	SMIM	SMA	CBB_E
--	------	-----	------	-----	-------

	SWOM	SMP	SMIM	SMA	CBB_E
CBB_E	.344	.335	-.145	.369	.000
CR	.167	.196	-.128	-.135	.633

Standardized Regression Weights: (Group number 1 - Default model)

	Estimate
CR <--- SMA	.099
CR <--- SMIM	-.220
CR <--- SMP	.408
CR <--- SWOM	.385

Transcribed Interview

Can you introduce yourself please?

My name is Azhar bin Majid, I am 44 years old working with Isuzu Malaysia sdn. Bhd. as a product development manager. Working with Isuzu for 6 years

R. thank you sir. I want to know about automotive brand equity.

Do you think automotive products can be branded?

H. Yes... Yes

r. can you give me example of automotive brands that you know?

H. Automotive brands are segregated into three categories. They are premium, middle class and lower class. And if you want to brand from lower to medium, you have to do somethings to upgrade their products.

R. what are the things you normally do to upgrade?

H. the first one is based on the technology. Is it equipped with all the safety features, the technology (the latest one), especially for the kind system and also the price will increase little bit.

R. do you think marketing activities like advertising, sales promotion will influence branding of automotive products

H. Yes for sure. Marketing strategy are very important to make it branding for the automotive. It is very important. Otherwise, people don't know about your brand.

Brand awareness

R. they recognize the car among other car brands

H. Yes, very important

R. I know what the car looks like

H. Yes, but nowadays, most of them (cars) are similar like *beza* and persona look alike.

R. if somebody want to go for Beza, do you think he has to know the characteristics of Beza different from persona?

H. Yes. They need to know the characteristics of the car.

R. I am able to easily recognize a brand name of the car

H. Yes.

R. Do you think brand name is important?

H. Yes very important.

R. Several characteristics of the car instantly come to my mind?

H. Yes

R. I can easily recognize the symbol logo

H. Yes

R. I am aware of the car personality?

H. Yes

R. it is a well-known car?

H. Yes especially like Toyota. Toyota is sell by its brand even though it is not a good quality, not up to standard but people still buy Toyota because of the brand not product.

R. What do you think Toyota is doing that Isuzu for example is not doing that make their brand more successful?

H. Because Toyota in Malaysia is almost around 50years while Isuzu is around 15 years. That is the difference.

R. but still, Malaysia nation car like proton and perodua have been around for a long time, and when I interview people, they still regard Toyota as higher in brand than proton. What do you think is the cause for that?

H. No. I don't agree with that. Because previously I am engineer for automotive. I am more based on technology not because of the brand. Look like *Inspira* and compare with vios, Inspira is better than vios in terms of the technology.

R. But when I interview people, they tell me that I will rather buy a foreign car rather than Malaysian car even though the quality is the same thing. So what do you think?

H. I am not agree about that

R. But this is what some people will say

H. Yes because Malaysian always see the brand not the technology.

Brand perception

R. Do you think people will buy the car because it is desirable?

H. 50% not every time.

R. the car is strong in personality?

H. this is base on mind set actually, because man and woman have different perception

r. the car has unique features?

h. yes. This is one of the reason

r. the car is fashionable?

H. Now Yes because people look for more sporty, more aerodynamic and everything.

r. Usually, what type of car would you go for?

H. if national car, Inspira or suprema s. actually, they are good car because they are made by latest technology. And for international brand, I will prefer Audi.

R. Why?

H. Audi is the best technology in the world actually. Because for me, technology is more important than the brand.

R. The car has reputations for quality?

H. Yes

R. The car provide user with a better lifestyle?

H. For Malaysians, I don't think so

R. What is important for Malaysians?

H, what is most important for Malaysians is look like, it is cheap, durable, and if they can afford to purchase, they will purchase. That is why I said there are three categories for the car. For the entrance level, maybe low range, then they will buy the low range.

R, what about maintenance, do you think Malaysians consider it?

H, for Malaysians, they are most important during the warranty period. After warranty period, they can do any work shop they want. We got the option now.

R, usually, when you buy Malaysian cars, you get warranty?

H, yes.... Yes... similar with foreign cars

R, the car provides good value to its user?

H, for me yes

R, the car improve the ways I am perceived by others

H, yes

R, the car will make good impression on other people?

H, Yes

R, the car will give me social approval?

H, sometimes. Not so important

R, the car help me feel accepted?

H, some

R, the car is an attractive car?

H, yes

R, the car is a classic car

H, yes

R, The car is a market leader?

H, normally, Malaysians don't know which car is a market leader. For now it is not Toyota, now is Honda. Number1 for passenger cars

R, if u want to sell car to people and you tell them this is a market leader, would they be confused and buy the car?

H, for people that are looking for confident level, yes. But for people that want affordable and look good, they don't care about market leader.

R, the car is successful car?

H, we cannot put if car is successful or not because we are not comparing apple to apple right now. If you are making a comparison, it has to be apple to apple.

R, the car is a corporate car?

H, look at the situation of the buyer. If you are entrance level, its not a corporate car for you to use to office to market, to shopping... everything, is not a corporate car.

R, the car is a fast car?

H, Yes. That is why Malaysians like to modify.

R, the car is a reliable car?

H, yes... most important

R, the car is a secure car?

H, yes

R, the car is upto date with trends in the automotive industry?

H, yes for some, because now we are heading for ECA regulation (Euro standard). Not only for Australian and cad, we are going for euro and cad also

R, this kind of thing, do you think it entice people to buy ears?

H, yes because of the safety and everything. You feel safety inside the car

Courageous car

R, the engine has very high performance reliability?

H, yes

R, consistence quality?

H, yes

R, consistence performance

H, yes

R, acceptable standard of quality

H, yes

R, very good engine power

H, yes, even though, customers never ask for horse power having, but they want very good in power

R, good transmission?

H, yes.. it is most important

R, mechanical quality?

H, yes

R, the car is well made?

H, yes

R, structurally attractive?

H, yes

R, has good design?

H, yes,

R, good model variety?

H, yes

R, attractive paint (color)?

H, some because not all manufacturer come out with certain color. They got 1 killer color like for Isuzu, we call it ululu brown. For toyota, they are good in white color. Honda are more to the black color because we must match the brand, the logo and also the color for people to accept.

R, you think the color for Isuzu is for them to enhance their branding?

H, yes. Unique... some unique color for each product.

R, so it is better to put unique color and not attractive color?

H, yes

R, body integrity?

H, people (publisher) are always concern about that, but for me, for safety reason, I don't want to do that because this is a cap ozone we call it. Because if you got accident, if you are too rigid, you will kill the opponent. That's why most of the manufacturer now do the very soft type of body because want to absorb if any accident.

R, good body style?

H, yes

R, overlook ability?

H, yes

R, trump volume?

H, yes

R, trump accessibility?

H, yes

R, trump variability?

H, yes

R, the car interior has good functionality?

H, yes

R, interiors are very easy to use?

H, yes

R, Beautiful interiors

H, for men, we don't see the beautiful, we just want the gadget there

R, quality interior?

H, yes

R, interior variability?

H, yes

R, the car has good driving stability?

H, yes.. very important

R, good corner handling

H, yes

R, good steering handling?

H, yes

R, the car has firm breaks?

H, yes

R, the car has front space?

H, yes

R, back space?

H, yes

R, good cooling system?

H, for engine or interior?

R, Interior

H, Yes

R, So engine also must have good cooling system?

H, yes

R, You advice me to split it into two right? Engine cooling system and interior cooling system

H, yes

R, good suspension?

H, yes

R, getting in and out of the car is easy?

H, yes

R, the car has very good comfort?

H, yes

Sustainability

R, do you think they consider the car if it is environmentally safe?

H, for Malaysia now we are towards that. Previously, we don't care about the environment. That is why previously we are using the 92 petrol. Now we go for the 95 and 97. For diesel previously we are using the euro 1, now we consider for euro 3 and euro 5. For most of the environment.

R, so you think it is important?

H, yes... we have to educate all the Malaysians. This vehicle is good environmentally care and advantage for you. Because for Malaysian government, if you get the green engine, your tax will be different. White engine different, black engine different.

R, what is the different between white and black engine?

H, white engine is the green engine (eco friendly) and black engine is not eco friendly.

R, environmentally responsible?

H, Malaysian, we are towards that. But we have to brand that for our product.

R, the car is financially sustainable?

H, Malaysian are concerned about this during warranty and after warranty, they will go anywhere. They go for the cheap price

R, the car is healthy?

H, we are towards that

R, efficient fuel usage?

H, yes. Like our Isuzu remix now, they purchase because it is fuel save.

R, Malaysians consider maintenance of car than the sustainability?

H, yes

R, so, you advice me to change sustainability to maintenance?

H, yes

R, exhaust is not polluting the environment?

H, we are working towards that.

R, what more can you advise me to add to the list

H, the first one, people here more concern about the price. Can they afford or not. Like me, I compare our Isuzu CV (commercial vehicle) compare with pino**. then, we make sure our price, our technology, our accessories (because accessories is not insert here, you need to

include it)- what accessories they like for passenger cars either they like the spoiler (france and US spoiler) Some people like the france spoiler and US spoiler for the manual (sustainability). Some people like to put the accessories like interior accessories (radio, gps)

R, so, accessories is now important to Malaysians?

H, yes. Maybe you can put accessories

R, do you think branding can be done for cars on social medias?

H, yes

R, are you using social media?

H, yes

R, like which social media are you using?

R, even for company, we got facebook, Instagram, whatsapp group, everything. That is why when we want to deliver message to all customers, we are using whatsapp.

R, do you think it is influencing your brand?

H, yes, for sure

R, how do you think it is influencing them?

H, lets say for the fb, we post 1 features like 4x4 *is turning*. When we post, 200 people, 100 people will share, then it become like 2000 view. Then at 2000 they share, they talk to each other and they make their own comparison. This Toyota like this, Isuzu like this, Mitsubishi like this.

And very important is mouth to mouth advertisement. That is why we have to convince people we are in the highest technology compare to others.

R, so you let the consumers do the job for you?

H, yes.

social media communication

r, the first one is what for example Isuzu is posting on facebook, it can be advertising, it can be sale promotion, it can be interactive marketing, and the second one is what the users are putting like word of mouth. So I want to see how this things can influence the development of brand equity of automotive brand. Do you think it is possible?

H, yes. Actually, we are towards this. For example, our service, normally customer call and sometimes customer call not suitable for us to receive. Then what we are doing, we send sms first. Then when the appointment come, one day before appointment, we send sms, we call because it is a technology. Some more, we got the whatsapp. Customer can enjoy the

whatsapp group for the workshop (any question, everything). I got the example because I am one of the admin for the whatsapp.

R, so, I want to see how this kind of activities help Isuzu to develop their brand and make people want to buy their products and prefer their products. Do you think this things can link together?

H, yes. But we are not only for the sales actually, because sales next year will drop around 15% for TIV (total industry volume). Because our ringgit dropped and also the buying power will be lower, that means no body will purchase car. What we are going to do now, our company forecast now is after sales. We are focusing on after sales. I am running one project, we take care of all of our fixed customers with big cars, what we are doing is we offer them with a package, and how we offer them, first we appoint our sales outlet dealers, we treat outlet dealers like us, the mechanic will be same like us, then we can distribute all information, the customer comes, we certain discount and everything.

R, how do you think this kind of package can help Isuzu?

H, because, we want the retention actually. Because after warranty period, customer gone. They can service outside. What we need is retention.

R, So perhaps, I can add retention again?

H, yes. Retention is very important. Because without retention, you are nothing.

R, not just sales?

H, yes. The first is after sales, second is the sales. That is why in automotive terms, the first vehicle sell by the sales men. The second and third vehicle sell by the workshops. If they are happy with workshop, they will purchase again and again and again. It is very important.

That is why we need the retention.

R, thank you sir

List of Publications

Articles in Journal

1. **Raji R. A.**, Sabrina, M. R. & Sobhi, M. I. (2018). Consumer-Based Brand Equity (CBBE) and the Role of Social Media Communications; Qualitative Findings from the Malaysian Automotive Industry. *Journal of Marketing Communication*, 1-24. Published by Taylor & Francis Online. DOI: <https://doi.org/10.1080/13527266.2018.1455066> (Indexed by Scopus).
2. **Raji R. A.**, Sabrina, M. R. & Sobhi, M. I. (2018). Social Media Marketing Communications and Consumer-Based Brand Equity: An Account of Automotive Brands in Malaysia. *Malaysian Jurnal Komunikasi, Malaysian Journal of Communication*, 34(1), 1-19. Published by Universiti Kebangsaan Malaysia Press. DOI: <https://doi.org/10.17576/JKMJC-2018-3401> (Indexed by Scopus).
3. **Raji, R. A.**, Sabrina, M. R. & Mohd Sobhi, I. (2017). The Relationship between Social Media Word-of-Mouth, Consumer-Based Brand Equity and Consumer Response among Automotive Consumers in Malaysia. (*Communication Journal*), 3(1), 181-205. Published by Telkom University.
4. **Raji R. A.**, Sabrina, M. R. & Sobhi, M. I. (2017) Assessing Validity and Internal Consistency of the Social Media Marketing Communication Measurement Scales. *e-Bangi Journal of Social Science and Humanities*, 12(3), 010. Published by Universiti Kebangsaan Malaysia Press.
5. **Raji, R. A.**, Sabrina, M. R. & Mohd Sobhi, I. (2017). Validity and reliability of automotive consumer-based brand equity and consumer response measurement scales. *Journal of Advanced Research in Business and Management Studies*, 9(1), 21-35. Published by Akademia Baru Press.

Working Papers in Journal

1. **Raji, R. A.**, Mohd Rashid, S. and Mohd Ishak, S. "Do firm-created contents on social media enhance brand equity and consumer response among consumers of automotive brands in Malaysia?" *Journal of Promotion Management*. Published by Taylor & Francis Online. **Indexed by Scopus**. (Accepted with Minor Revisions).
2. **Raji R. A.**, Sabrina, M. R. & Sobhi, M. I. "The Mediating Effect of Brand Image on the Relationships between Social Media Advertising, Social Media Promotion and Consumer Response". *Journal of Research in Interactive Marketing*. Published by Emerald Insight. **Indexed by Scopus**. (Under Review).